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American Railroad Journal.

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Saturday, March 4, 1854.

Construction Account of Railroads.

The "*Construction Account*" has always been the great bugbear in railways; the moth that eats up their income; the barrier that often rises at the unlucky moment to cut off the unfortunate stockholder from his dividends. It is the rapid and uniform increase of this *account*, that has rendered *English* Railways so unproductive. There is no department in railway economy that has called forth more discussion on the part of the English press. But the disease is not checked, nor its cause apparently understood. It still remains the great blight in the railway system of that country.

It is natural that Europeans should suspect similar causes to be at work in the railway system of this country, that have produced such disastrous consequences in their own, especially when they witness a similar increase in the construction account of its railroads. If the *uniformity* in the two cases be due to *different* causes, they may not be able to detect their dissimilarity, and may properly call for an explanation. If on the other hand, a similar result proceeds from one and the same source, then it is high time that the attention of our own people was directed to a subject which may suddenly discover to them, that a property at present so highly valued, is comparatively worthless.

Without attempting any explanation of the cause of the increase of the construction account of *foreign* railroads, we are free to admit, that in this country, a rapid increase is not only inevitable, but necessary and proper. There is, in all cases, a necessary relation between the *business* of a road and its *cost*. Were it otherwise, the ordinary principles which lie at the foundation of every kind of business, would be subverted. The profits of railroads are regulated precisely as are the profits of all other kinds of business. Money invested in them, can, in the long run, earn no more than an equal amount invested in trade, commerce, or in manufacturing. Every profitable enterprise is pushed till the profits are brought down to the ordinary level of other investments. A manufacturer cannot execute double the usual amount of orders without increasing his works. If he sells two hundred thousand dollars worth of goods *this* year, where he sold *one*, last, he cannot do so without doubling the make, which will require him to double his investment; so that no matter how much he may increase his business, the *rate* of his profits may not be increased in the slightest degree. He is simply doing a larger business, upon a larger investment.

The operation of our railroads presents a precisely parallel case. A business yielding $500,000 *annually*, may fully tax the present capacity of a road. An increase of receipts to $600,000 necessarily involves an increased investment for its accommodation. This increased cost will, in the end, as we have seen, bear a very exact ratio to the increase of business. When the receipts of of such road shall have gone up to a million, we may very safely calculate that upon the settlement of all bills, the construction account will have doubled, or nearly so. That such *should* be the result, is reasonable. That such *is* the result, experience fully proves.

The increase in the construction account of a railroad is, *ipso facto*, therefore, by no means improper, nor is it any cause for suspicion or distrust of its management, *provided* the receipts increase in like ratio. The two must go together. It is the fact whether they *do* agree, and whether any proposed outlay will proba bly be justified by the result, that should excite and command attention.

The increase of the *construction* accounts may, therefore, be no more objectionable than the original construction of a railroad, nor in fact so much so. The objection does not go against the principle, but the *expediency* of the thing, and it is to the question of expediency that purchasers of securities must look as well in one case as the other.

In looking into this matter it will be found, that while, as we have seen, the business and cost of a road, provided the latter be productive, may properly increase in equal ratio, the business of our roads increases much faster than their cost. The increase of business is probably equal to 25 per cent. per annum upon the average of our roads; certainly 20. The cost of our lines in operation does *not* increase in equal ratio. There is a good reason why it should not, in the fact, that business of most of our roads does not come up to the capacity of either their tracks, nor equipment. A *larger* business can be transacted without material increase in outlay. For this reason a proposed increase in the construction amount of a railroad, should be made the occasion of the utmost consideration and reflection, but no more so than the reasons for the original construction of the road. Both may result in the conclusions that a proposed expenditure is unwarranted, either by an existing or prospective business.

We are glad to see the construction and management of the railroads of this country subjected to the most rigid scrutiny, but this scrutiny should be exercised under broad and enlightened ideas as to the objects and functions of these works. Measured by such a test, the *doubling* of the first cost of a road may be shown to be both proper and expedient. While this is true, we hope to see every important step taken by railroad companies, and every large expenditure of money, made a subject of careful inquiry and investigation, on the part of those parties owning it. Such in-

vestigation may secure a more economical expenditure to effect a given object, or may result in showing it to be altogether unadvised.

Progress of Liberal Ideas.

While Pennsylvania has rendered herself notorious for her attempts to obstruct the commerce of the country to promote the supposed advantage of her people, it is gratifying to see that two other States, Virginia and Illinois, have very recently repudiated a similar policy, of which both have long been champions. The legislature of Illinois have just legalized the construction of the *Mississippi and Atlantic Railroad*, and by doing so has probably broken down *all* barriers to the free construction of these works in every portion of that State. The legislature of Virginia has also granted the right of way across the *Pan Handle*, to the Pittsburgh and Steubenville Railroad; a right which has been pertinaciously denied up to the present time.

We cannot help attributing the above results, in a great measure to the recent course of Pennsylvania in reference to the affairs at Erie. Her conduct was a mirror in which the States named saw the odiousness of their former policy. In this way only could they be made to see, their own lineaments. Some good, therefore, has come out of the Erie difficulties already, in showing States the folly and injustice of all attempts to subject commerce to any other burdens than the mere *cost* of movement.

It is gratifying to witness the progress of correct ideas in railway legislation. There is no doubt that the best legislation upon these matters, is none at all, except such as is necessary to restrain companies within the sphere of their proper functions. Railroads are *commercial* enterprizes, as much as are ships, or manufacturing establishments. It would be regarded as the height of absurdity, were the Legislature of New York to presume to dictate the number of ships to be built annually at this port, or the character and destination of their cargo. It would be said, and very properly, that these are matters entirely beyond the scope or capacity of a legislative body, and could be safely entrusted only to the guidance or *individual* interest. Legislatures are equally incapable of directing the location, mode of construction and management, of railroads. This fact is fast coming to be acknowledged. A number of the States have consequently thrown wide open the door for railroad construction, by authorizing voluntary associations to organize themselves into companies, and vested such by general laws with the power to construct railroads where they chose, and as they chose; leaving such companies the judges of the propriety of their acts. The advantages of such legislation are obvious. When a body of men understand that they are to receive no *incidental* aid, or support, but that their projects must stand or fall upon their own merits, they will be very carefu l to engage in no enterprize that will not pay, nor incur any exp nditure not justified by the result. Under *such* legislation, the *first* roads will be built upon the *best* lines, which will leave no mistakes to be corrected by subsequent schemes; consequently we shall escape one of the great causes of rival roads. Such roads are generally built, because their predecessors, under the idea that their charters secured to them certain immunities, failed to locate their lines in a manner to accommodate the public. Remove all such idea of legislative protection, and railroad companies will have nothing for a rival, or subsequent work, to remidy.

English Railways.

From the annual statement in Herapath's, (London), Railway Journal, it appears that the total mileage of railways in the United Kingdom, on the first day of January A. D. 1854 was 7,774 miles. The total receipts from the same for the year was, £17,920,540. Receipts per mile, £2,303. Total cost of construction, £263,636,320; being at the rate of £33,912 per mile.

The following remarks of the Railway Journal, in reference to the management, cost, income, etc., of English Railroads, will be of interest to our readers.

It will be seen by the above table that the additional mileage opened in 1847 was 839 miles; in 1848, 975 miles; in 1849, 835 miles; in 1850, 1,078 miles (of which 487 miles were open in 1849,) but the traffic returns were not published till 1850. In 1851 the additional mileage was 299 miles; in 1852, 374 miles; and in 1853, 278 miles. Nothing can be more satisfactory than the traffic returns on railways; they have progressed at a rate far beyond the most sanguine expectations of the promoters of railways, but from some unknown cause the capital expenditure has more than kept pace with the advance of the traffic. This state of things has produced considerable disappointment in the minds of those who have invested their money in railway undertakings, in the hopes that the natural development of the traffic would survive all additions to capital expenditure.

It would appear that there must be some very great inducement on the part of railway Directors to expend large sums on capital account; and so long as that inducement exists there is no hope of dividends improving to any great extent. Almost every increase of traffic, or chance of increase in the dividend, is immediately forestalled by some secret measure on the part of the Directors, either in the shape of leasing other lines, of making some new branch, of guaranteeing some line a dividend, or by creating preference shares for new branches or extensions. It seems as if it were the destiny of some railway boards in Great Britain to forestall, to overreach, or intercept any increase of dividend to the shareholders. There are very few instances of the converse of this in railway management; there is however one solitary instance in the Lancaster and Carlisle, a railway upon which, with the Lancaster and Preston, together 90 miles in length, about £2,000,000 have been expended. This united Company have neither branches nor guarantees, and fortunately for the proprietors, when the line was projected, it was thought by all the great railway men in that day, that it was scarcely possible for it to pay any dividend on account of the country being so poor through which it passed. The consequence was, the capital expenditure was kept down to the lowest limit, and the Company have ever since reaped the benefit of the "oversight," and the line has paid dividends of 6, 7, 8, and will, probably, 9 and 10 per cent., if let alone, while the average receipts of railways in the United Kingdom scarcely amount to 3½ per cent., notwithstanding the extraordinary development of traffic on railways which the above table exhibits.

Owing to the very effective mode of carrying out the joint stock system in the United Kingdom, projectors and Directors of railway and other companies, are rewarded for their services by indirect means. They are thrown upon their own resources to devise means to make what they can, either in buying up land, in making contracts, in getting shares out at a premium, in creating preference stock, in leasing worthless lines at high rents, and doing all sorts of things for the alleged benefit of the companies they manage, but in reality for their own benefit and that of their friends. All this involves great extravagance, and a wasteful expenditure of capital, which will certainly be perpetuated so long as the present system continues. The only remedy for this state of things, is to adopt the French system, which very properly provides for the promoters of good and useful schemes, by giving them an interest in the profits of the railway, &c., when they exceed 5 per cent. per annum on the capital expended. In most cases, they have one-tenth of the amount of profits beyond 5 per cent., and this accounts for the great success of French railways and the disastrous state of railway property in England. It is, therefore, not the interest of the French Directors to spend the capital of the company wastefully, or to give it away to excess to contractors, in order that the contractor may return a percentage, but to construct the works as well and as cheaply as possible. The fault lies with shareholders in a great measure, who are generally very selfish, and not over anxious to reward services, even when they have been rendered faithfully. Unless Parliament determine on making all the existing railways monopolies, in the strict sense of the word, and authorize them to make any railway they please, restricting other parties from having anything to do with future railways, there will be no security for railway property as at present constituted and managed. Any new company adopting the French system in England, will reap their reward, and the old railway companies will suffer in a corresponding degree. The new stock will be receiving good dividends, while the old companies, going on with an open capital account, will be scarcely able to improve their dividends, and that, too, notwithstanding the continued development of the traffic. It is a good feature in the South Eastern and South Western Railways that some of the Directors think they have expended enough on branch lines; and it is hoped the same view may be taken by Directors of other companies who do not receive remunerative dividends.—Were it possible to put an end to continual litigation and parliamentary warfare, even for a limited period, say 5 or ten years, and to close the capital accounts of railways now yielding small dividends, the result would be of a most beneficial character,—the only increase allowed being for working stock and additional accommodation for traffic. This should be done with great care, and the effect would be productive of profitable results.

The annual increase of traffic on railways has been very considerable, partly arising from the further development of traffic on the trunk lines, and partly from the additional receipts derived from the opening of new lines and branches.—The increase in the year 1843 over that of the preceeding year, amounted to £500,874; in the year 1844, to £768,337, in 1845, to £1,058,342; in 1846, to £1,020,650; in 1847, to £1,285,797; in 1848, to £1,109,335; in 1849, to £980,808; in 1850, to £1,744,161; in 1851, to £1,809,923; in 1852 to £520,402; and in 1853, to £2,040,220. The great increase of traffic in the year 1850 is due in a great measure to the encouragement given by railway companies to excursion traffic, the increase in 1851 chiefly arose from that cause in connection with the Great Exhibition and the general improvement in trade. It would appear that the efforts made to increase the traffic in 1850 and 1851, had re-acted on the natural increase of traffic in 1852, and reduced its amount by £682,400 as compared with the average of ten preceeding years.—The great increase of trade to Australia and America, consequent on the gold discoveries, has had the effect of raising the traffic in 1853 to a point which had never been reached before, showing an increase of £2,040,220 over the preceding year. The average increase of traffic from 1843 to 1848, over preceding years was at the rate of £1,048,470 per annum, while that from 1848 to 1853 inclusive was at the rate of £1,424,419 per annum. The total increase at the end of ten years was £12,837,530, and, should the traffic increase only at the same rate during the next ten years, it will amount in 1863 to about

£30,000,000; but it is hoped the amount of capital will not likewise increase in proportion, as in that case there will be no better dividends than at present. It is evident that railway shareholders have only one thing to do in order to insure future success; that is, keep a strict watch over the increase of capital and not trouble themselves at all about the increase of traffic, as that will come of itself in defiance of the artful representations of interested parties to the contrary. To close the capital accounts as soon as possible, and as far as practicable, should be the business of railway shareholders who wish to preserve their dividends from "growing small by degrees and beautifully less." It is the opinion of some eminent railway authorities, that if the railways in the United Kingdom had been constructed prudently and judiciously, as commercial undertakings, that about £90,000,000 might have been saved on the present outlay of £263,000,000.

The average traffic receipts per mile per annum were as follows: For 1842, £3,118; for 1843, £3,085; for 1844, £3,278; for 1845, £3,469; for 1846, £3,305; for 1847, £2,870; for 1848, £2,556; for 1849, £2,302; for 1850, £2,227; for 1851, £2,283; for 1852, £2,238; and for 1853, £2,471.

The amount of capital expended on the railways referred to up to July, 1842, was £52,380,100; in 1843, £57,635,100; in 1844, £63,482,100; in 1845, £71,646,100; in 1846, £83,165,100; in 1847, £109,528,000; in 1848, £148,200,000; in 1849, £181,000,000; in 1850, £219,762,730; in 1851, £229,175,235; in 1852, £239,467,453; and in 1853, £252,802,320.

The average cost of the railways in operation per mile would appear to be in 1842, £34,690; in 1843, £36,360; in 1844, £35,670; in 1845, £35,070; in 1846, £21,860; in 1847, £31,709; in 1848, £34,234. in 1849, £35,214; in 1850, £35,229; in 1851, £35,058; in 1852, £34,630; in 1853, £35,101. The most satisfactory feature in railway statistics is that of the average cost per mile remaining at about the same figure as in 1842, notwithstanding that many comparatively cheap lines have been added to the system since that date. In 1842 the average cost per mile was 34,690*l.*, and the receipt for traffic during that year was 3,113*l.* per mile, while in 1853 the average cost was 35,101*l.* per mile, and the receipts from traffic 2,471*l.* per mile. This reduction in the receipts per mile occurred notwithstanding that the annual traffic receipts increased from 4,341,781*l.* in 1842, to 17,180,000*l.* in 1853, being an increase of traffic to the amount of 12,845,320*l.* Great expectations have been for some time held out respecting the presumed advantages likely to arise from the establishment of a standing committee of the House of Commons, for the regulation and protection of railway property; but railway shareholders had better not rely too much on Parliament for the security of their property until it is very differently constituted; and so long as a great portion of the Legislature is composed of railway Directors, it is not likely that anything will be done either to limit the power of railway Directors, or to increase that of the shareholders.

Proprietors of railway property are too apt to delude themselves with the hope that things will right themselves in time and that the present system of managing railways will last their time, and so it may; but those who live long enough, and those who come after those who do not, will feel the effects of their past and present negligence. Cheap railways will and can be made, and are being made; and unless all further extensions or branches of existing railways are made very cheap, indeed, and worked economically, the consequences will be very serious to the widows and orphans whose property is invested in railway companies. The system adopted during the past 10 years has reduced the dividends on the great trunk railways of this country, above 50 per cent., and the value of the railway stock to one-half, and in some cases to one-eighth or one-tenth; and if there be no check, there is nothing to prevent the same devastating effects on railway property during the next 10 years that have operated with such fearful effect during the past 10 years. It is true, the revenue has increased from 4,843,000*l.*, in 1843, to 17,180,000*l.*, in 1853, nearly 12½ millions during the past 10 years on certain railways; but the capital has increased from 58,000,000*l.* to 253,000,000*l.* during the same time, or 195,000,000*l.*, and there is nothing to prevent the increase of expenditure during the next ten years from 253,000,000*l.* to 450,000,000*l.*; as not much more than one-half the railways already sanctioned by Parliament have been constructed, and as there remain about 6,000 miles more to be sanctioned, and made to accommodate the traffic in various districts of the United Kingdom, railway projectors have still a wide field before them.

It appears from the company's report that 7,834,664*l.* had been received on 6,900 miles of railway in the United Kingdom during the half year ending June 30 last, and that 3,806,126*l.*, or 48·57 per cent., had been expended in working expenses, rates, and taxes, leaving 4,027,738*l.* to pay interest and dividend on the outlay, amounting to 247,766,314*l.*, or 1.62 per cent. for the half year, or at the rate of 3.24 per cent. per annum.

The receipts on the railways in England and Wales for the above period amounted to 6,659,581*l.* and the expenses to 3,263,767*l.*, or 49 per cent., leaving a balance of 3,395,814*l.* to pay interest and dividend on 206,397,601*l.*, being at the rate of 1.65 per cent. for the half year, or 3.30 per cent. per annum.

The receipts on the railways in Scotland amounted to 802,380*l.*, and the expenses, including rates and taxes, and Government duty, to 383,649*l.*, or 47.8 per cent., leaving 418,731*l.* to pay interest and dividend on a capital of 28,282,548*l.* or 1.48 per cent. for the half year, or at the rate of 2.96 per cent. per annum.

The receipts on the Irish lines amounted to 372,703*l.*, and the expenses, including rates and taxes, to 158,711*l.*, or 42.6 per cent., leaving 213,992*l.* to pay interest and dividend on a capital of 13,086,165*l.*, or 1.635 per cent. for the half year, being at the rate of 3.27 per cent. per annum.

The length of the line over which the traffic was carried during the above half year in England was 5,176 miles; in Scotland, 943 miles; and in Ireland, 781 miles. The receipts per mile were respectively 1,286*l.*, 851*l.*, and 477*l.*; and the cost of construction 39,872*l.*, 30,000*l.*, and 16,755*l.* per mile.

New York Locomotive Works.

We have had the pleasure of examining a fine locomotive engine, just finished by Breese, Kneeland & Co., of 38 Exchange Place, New York, and whose works are conveniently situated in Jersey City. This locomotive was constructed for the Hudson River Railroad, for running the heavy express trains. It combines very favorable features to this end, having 16 inch cylinders with 22 inches stroke, and drivers of 6 feet 6 inches diameter. It is constructed with such arrangements and proportions as are admitted to be *improvements*, and was from the first intended to be a first class work. The driving wheels are of an elegant pattern, forged from *wrought iron*; an application of much importance in the increase of strength and reduction of weight. In other important particulars this engine presents especially favorable points. The mechanical execution of its parts is also of the best description.

Breese, Kneeland & Co., have erected a large and complete establishment for the construction of locomotive work, and have secured the best machinery, and what is of equal importance, the best talent for the successful prosecution of the business. Their Superintendent and Engineer, Mr. E. P. Gould, formerly occupied a responsible situation in the locomotive department of the Hudson River Railroad, a work which has become a graduating school for the best engineering talent in the country.

The New York Locomotive Works are situated most favorably for a cheap command of materials and an economical delivery of work. Engines can be delivered directly on ship-board or on the New York and Erie and New Jersey Railroads; and by a short ferriage upon the Hudson River and all Northern and Western roads.

Railroads of Ohio.

Capitalists and others, who, in stringent times, hear much and think more of the over construction of railroads in Ohio need occasionally to be reminded of the position and resources of that State. Her extent and wealth are well enough known.

Ohio has great water routes on both her northern and southern borders. If the one is not as safe for navigation as the bays on the Atlantic coast, and the other as uniform in volume as the Hudson, both have nevertheless served the purposes of a great trade, and still confer advantages which few other States can enjoy. Three important commercial depots have been established on the northern water border, Cleveland, Sandusky and Toledo. All of these have the command of a wide and fertile back country; two have the advantages of artificial water routes, extending through that country to the water line on the South; while all are in the line of the great trade between the cities of the East and Chicago, the great city of the North West.

On the South, Cincinnati, placed by a "great bend" of the Ohio river far *within* the State, has attracted a population and trade which place it among the great commercial cities of the continent. It commands also superior natural resources and means of communication. It is the commercial depot of a great agricultural and mineral country. It has an uninterrupted water line to the principal Eastern market. For 750 miles of the Ohio River it is the nearest point to the Lake ports, being nearly equi-distant from Lakes Michigan and Erie. By going 500 miles up the Ohio to Pittsburgh, no more than 100 miles are gained in proximity to the lake, and but little more than 100 miles to the common point, Cleveland. Most of the intervening points in this distance are much further from the Lake than Cincinnati, while the Ohio river forms their natural outlet of trade, of which Cincinnati is the direct recipient.

On the West lies the united fertility and wealth of the best part of the great valley, the products of which, so long as the Eastern continue to be the consuming States, will be carried principally to them. To the above is to be added the natural wealth which Ohio contains within herself, her fields, forests and minerals. Great in extent, she loses nothing in inaccessible or unavailable territory.

With such position and resources, Ohio has established, and given *character* to, a great trade, while in doing this, she has employed but a small share of the elements at her command. It is this trade in which each of the great commercial cities of the Atlantic is seeking to participate, *each* perhaps hoping to *secure*.

New York has commanded the whole northern water front of the State by her great work, the Erie Canal. The New York Central and Hudson River water route has overcome its disadvantage

of greater lineal distance, by its capacity, facility of operation, and the commercial advantages of its terminus. Although it imposes on the through trade and travel from Cincinnati 300 miles of distance more than lies between the latter and Baltimore, it has become the established route from the greater portion of Ohio. How far the preference it has received has been determined by the enterprize displayed in its construction and operation will be exhibited upon the completion of *shorter* routes to other Atlantic cities. But New York will forever have the advantage of the great *natural route*, upon which a canal has taken the character of a *river*, the former working under but little more disadvantage in this comparison than the interest on its cost. It has become a *rival Mississippi* in the extent of its trade, if not in the volume of its current.

A water route that will support itself will support a railroad, and neither will be injured by the other. This is a principle sustained by all precedent. In this fact lies the construction and success of the entire railroad line from New York to Cincinnati, 880 miles, and from New York to Chicago, 955 miles.

With the construction of railroads commenced the contest between Eastern cities for the trade of Ohio and of the country beyond. The great railroad line from New York followed the water line to Cleveland; until the opening of the Erie road, which has since *shared* in this trade.

Philadelphia extended her great line to Pittsburgh. From thence the same interest has established its *interior* line to Chicago. At Pittsburgh, the Steubenville road, connecting at Newark with the Central Ohio, aims at Cincinnati. 31 miles East of Pittsburgh, the Hempfield road connects the direct line from Philadelphia to Cincinnati, 645 miles in length. From Wheeling, *via* Marietta, the distance is only 25 or 30 miles more.

Baltimore has extended its road to Wheeling by which it reaches Cincinnati, over the Central Ohio Road, in 620 miles. Its direct connection through Parkersburgh will reduce this distance to 580 miles.

So far, the longest routes have had the advantage of priority of construction, and the *shortest* Eastern outlet of Cincinnati will doubtless be completed *last*

It is this inevitable competition between *Eastern* cities that has given to the railroad system of Ohio its present complicated character. It has created nine east and west lines, cutting the sixth degree of longitude, or about the meridian of Portsmouth, Columbus, Galion and Sandusky. It has intersected the State, between the 39th and 41st parallels of latitude, with *twice* the number of eastern trunk lines which lie between the 39th and 43d parallels.

Of those lines which are strictly vertical lines on the map, aiming to connect the northern and southern water lines of the State without reference to eastern connection, there is but one completed in Ohio:—The Sandusky and Cincinnati line. To this will be added eventually the line from Sandusky to Portsmouth and the Dayton and Michigan road.

At the present time more than one third of the entire State of Ohio, lying to the South and East of Wellsville, Zanesville, Columbus and Cincinnati, is without means of railroad communication.—And this part, not likely to remain without such facilities for any great length of time, contains, besides agricultural, a great portion of the nominal wealth of the State. With the river, the Ohio Canal and the Scioto and Hocking Valley and Iron Railroads, this trade has already attained an important development.

One limit of railroad competition in Ohio must be that of the Eastern cities. Those lines on the route to the successful eastern competitor will *pay*, for they will *attract* trade in proportion as their eastern terminus *receives* it.

To all of the eastern cities Ohio is an empire, and the highway to an empire beyond. But while the independent systems of these cities ramify the State with their lines, most of these will find their support in their local trade. Their cost and their operating expenses will be nearly in proportion to their business. This is a rule which has proved generally correct in the east, and it will be still more likely to be true in the west. A railroad in Ohio can be built nearly as cheaply in one direction as another. Not so in New England and in the greater portion of the middle States. In the east a river route often commands the greater busines while it is at the same time usually the cheapest of construction. On the contrary those roads which cross the streams contend against continual diversion of their business, and incur far greater expenses for construction.

If then, the construction of through lines in Ohio is regulated by the local wants of the State there can be no danger of over construction. It is the extent of these wants that forms the real question. They require that every available element of wealth shall be accessible, and its products have an outlet. But to command a *choice* of *every* market cannot be afforded by every farmer, manufacturer or merchant. If the construction of all tributary lines be left to those who stand in need of their facilities there will be little danger of over-construction.

It is then the local wants of Ohio that must be the guide in extending financial aid to her new roads.

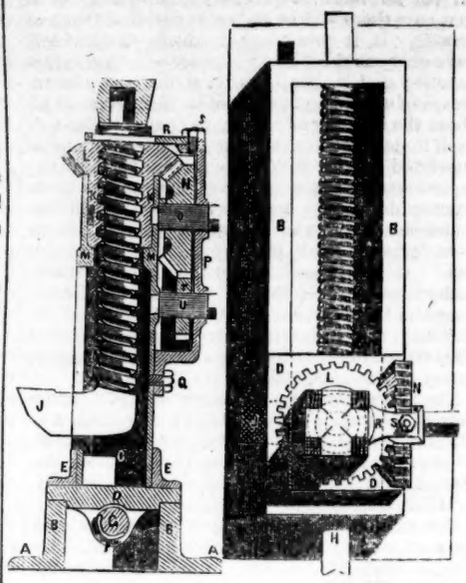
The surest indication of their wants must be the support given to such works by those who are likely to be most benefited by their construction. With this check, and the gradual development of the wants of the people, and the capacity of the roads already constructed, there will be at least no necessity for more through routes.

The present system commands, on the most direct routes, all of the Atlantic cities above Washington; besides Indianapolis, the lake ports, St. Louis and the most important points of distribution on the Mississippi. When these shall command the natural drainage of their respective districts the Railroads of Ohio will be completed.

Canada.--London and Port Stanley Railway.

The County Councils of Elgin and Middlesex have taken stock in this road to the amount of £45,000, the former £20,000 and the latter £25,-00. We believe this includes the whole of the stock not previously subscribed for. The road is expected to be in full operation before the close of the present year. This important branch will prove a valuable feeder to the Great Western, as boats will run in connection with the road from Port Stanley to Cleveland.—*Hamilton Spectator.*

Traversing Screw Jack.



We copy from the Mechanics' Journal a cut of the improved traversing Screw Jack, as now manufactured by Geo. England & Co., of Hatcham Iron Works, London. The drawing represents a cast iron base with planed ways, upon which the standing part of the Jack may be moved by a horizontal screw. The standing part may be operated on two ranges of elevation, both ends of the screw being adapted for lifting.

By working the pinion T, which is of but one-half the diameter of the wheel N, the lift may be doubled in weight with the same expenditure of power.

The traversing Jack is of great value in replacing cars which are off the track, and for many purposes of timber and masonry framing.

The Western Railroad.

The Springfield Republican states that W. H. Swift, Esq., voluntarily retires from the Presidency of the Western Railroad, though he retains his place in the direction. Chester W. Chapin, Esq. of Springfield, who succeeds him, has recently become the largest private stockholder in the road. His assumption of the reins of the Western will probably produce some change in the management of the Connecticut River Railroad, of which he has been for the past two or three years the successfull President. Mr. Chapin, it is said, is in favor of having the treasury and executive departments of the corporation located at Springfield.

Analyses of Water.

It is important to every railroad company to know the chemical constituents of the water along its line, in order to guide the choice of water stations. The effects of different waters are well known to those having charge of the operation and maintenance of locomotives. At points, perhaps not half a mile apart, water of entirely different qualities in its effects on boilers and on the production of steam, is often found. An analysis will disclose these qualities and determine which will occasion the least incrustation, oxidation and ebullition.

The following are the analyses of different waters use for locomotives on the Erie Road, and extend over a distance of 300 miles. They were made by James R. Chilton Esq., Chemist, of New York.

In 1 Gallon.	Piermont Reservoir.	Tank in Piermont Shop.	Tank (New) in Middletown.	Goshen Tank.	Chester Tank.	Turner's Tank.	Tank Piermont Shop 2d Trial.	Iron sec. 2.	Wilke's.	Monroe Works.	Clarkstown.	Spring above Monsey; proposed to use.	Do. at Spring Valley do.	Old Tank at Middletown.	Piermont Reservoir same as 1.	Monsey.	Otisville.
Carbonate of Lime and Magnesia....	2.52	1.20	6.28	12.56	6.24	0.92	1.27	1.24	0.81	0.45	4.42	2.28	1.16	1.24	1.60	2.10	2.82	1.01
Do. of Soda	..	..	..	..	..	0.04	..	..	..	..	..	..	..	..	..	..	..	..
Sulphate of Soda...	..	..	..	..	..	2.76	..	..	..	..	0.95	..	..	..	..	..	0.42	..
Do. of Lime	1.04	0.44	3.32	3.76	0.84	0.08	0.14	0.18	0.09	0.10	0.57	0.14	0.44	0.40	0.32	0.14	0.13	0.02
Do. of Magnesia....	0.56	0.48	1.28	3.44	0.64	..	0.35	0.51	0.44	0.55	..	0.30	0.36	0.56	1.04	0.41	..	0.21
Chloride of Magnes., Calcium, Sodium.	0.80	1.60	5.04	6.16	4.56	1.72	1.83	1.71	1.04	0.52	6.51	2.33	0.84	0.76	0.64	2.54	3.00	1.16
Oxide of Iron	a trace		0.01	..	a trace	..	..	..	..	..	0.01	0.09	..	..	..	..	0.11	..
Organic Matter.....	0.08	0.08	0.09	0.12	0.13	0.08	0.09	0.08	0.02	0.02	0.12	0.10	0.04	0.04	0.03	0.09	0.08	a trace.
Total Grains.	5.00	3.80	16.02	26.04	12.41	5.60	3.68	3.72	2.40	1.64	12.58	5.24	2.84	3.00	3.63	5.28	6.56	2.40

	Shin Hollow.	Elmira.	Great Bend.	Binghamton.	Union.	Owego.	Smithboro'.	Waverly.	Elmira.	Big Hats.	Corning.	Cameron.	Kirkwood.	Addison.
Carb of Lime..... }	1.31	7.74	.16	8.48	.50	4.26	.84	2.80	4.26	1.25	1.55	1.98	..	1.21
„ „ Magnesia..... }		.64												
„ „ Soda.....	..	..	.14	.64	1.10	.94	..	.08	1.02	.51	.09	..	..	..
Sulph. of Soda.....	..	..	..	..	..	..	..	..	..	..	..	..	.10	.25
„ „ Lime.....	.36	.62	.21	3.17	..	.89	.18	.15	.84	.38	.41	.24	.35	.16
„ „ Magnesia ..... }	.14	2.00	.41	1.36	..	1.35	.26	1.67	1.68	1.10	.71	.62	..	..
„ „ Soda..... }														
Chloride Magnesium..... }		1.22												
„ Calcium ..... }	.89	.60	1.60	3.12	1.19	1.44	.40	.90	4.14	1.50	.44	.77	1.88	.42
„ Sodium..... }		1.18												
Oxide of Iron.....	..	..	0.04	..	..	..	..	0.02	..	..	.04	..	trace. }	.44
Organic Mat.	.03	.. }	0.02	0.03	0.01	0.04	0.07	0.05	0.06	.10	.04	.03	.25 }	
Silica &c.....	..	.04 }												
Peculiar Gelatinous Substances	..	..	..	..	..	..	..	..	..	..	..	..	1.25	..
Total.....	3.03	14.04	2.58	16.80	2-80	8.92	1.75	5.67	12.00	4.84	3.28	3.64	3.86	2.48

Corrugated Boiler Iron.

We observe that arrangements are in progress for the manufacture of corrugated iron for boilers.—The ribbed or channeled surface, it is expected, will possess a positive advantage in strength over the plain sheets now in use. As the patentees claim, "the principle of the arch is borrowed from architecture," and "the result is equivalent to the discovery of a new metal of increased strength."

It would appear at first sight that the strength of the material is of the greatest consequence in the construction of steam boilers; but yet, owing to the mode of connection of the plates, by the usual resort to *riveting*, nearly one half the strength of continuous sheets is lost. There are no locomotive builders in our country who take the pains to form the connection of their boiler plates by double *riveting*, in which plan it is ascertained that but about thirty per cent. of the strength of the iron is removed in punching. The only method of connection of plates by which their ultimate strength is preserved is by *welding*. Timothy Hackworth of Darlington, England, built several locomotives in which the boiler plates were welded in the circumference of the shell; the connection of the sections longitudinally being made by riveting. Here nearly the ultimate strength of the material is preserved, and any inherent advantages of form, as in corrugations, would assist in increasing the total strength of the boiler.

As corrugated plates involve loss of space for the insertion of flues; as they increase the cooling surface of the boiler; as they present a difficulty in cleaning the boiler; as they are more expensive, more difficult for working, probably more liable to imperfections in rolling, there is no motive to their use, *provided* the manner of their connection is not such as to preserve the ultimate strength of the material. Any mode of connecting corrugated plates must be expensive and perhaps insecure, unless effected by means different from those generally at command in boiler shops.

The increase of *weight* of these plates, due to the greater extent of developed surface in a nominal unit of area, is one objection to their use; unless their increased strength is *dependent* and *proportionate* to their increased surface, in which case the same strength would be much better obtained by increased thickness of plane-surface plate.—With corrugations equal to one half of a circle on each side of the central plane of the sheet, the increase in surface, and consequently of weight, would be 57 per cent.

In the construction of locomotive boilers, the use of corrugated iron could scarcely be regarded as an improvement, in view of the practical difficulties in the way of its manufacture, shaping, connection and disposition. The weight, expense loss of room, increased cooling surface and liability to retain deposits, attended with greater difficulty of their removal, are all objections operating in the same direction.—*American Railway Times.*

The Railroads of Virginia.

At the beginning of every year a statement of the length of railway in each and all of the States goes the round of the newspapers. It is always more or less defective, being generally below the truth. Virginia especially has been credited for much less than her actual share of railway enterprize. To do her justice in this respect, before her own citizens as well as those of other States, we decided to compile the subjoined list of the lines now underway within her limits or in the hands of her people. Among them are three lines the greater part of which lies within Virginia, the Seaboard and Roanoke, Petersburg, and Hicksford and Gaston; and one which is principally, we believe, in North Carolina, but prosecuted mainly by Virginia capital. This is the Clarksville and Ridgeway, a link in the route from Norfolk to the upper Roanoke. The 251 miles of the Baltimore and Ohio road lying in this State are excluded from the sum, because on the principle we follow in the case of the above named roads they are assigned to Maryland.

Name of Road.	Miles opened.	Miles building.	Total miles.
Virginia Central	107	70	188
R. F. and Potomac.....	76	..	76
Covington and Ohio (State).....	..	115	228
Va. and Tennessee and branch..	73	139	212
Rich. and Pet. and branches....	40	..	40
Petersburg and Roanoke.....	60	..	60
Hicksford and Gaston.....	21	..	21
Norfolk and Petersburg.....	..	62	79
Seaboard and Roanoke.....	78	..	78
South-Side	71	49	120
Danville and branches	95	51	146
Orange and Alex. and branches..	82	15	155
Manassas Gap and branch.....	42	19	146
Winchester and Potomac.....	32	..	32
Tuckahoe (coal)	5	..	5
Winifrede (do.)	5	..	5
N. W. Va.	..	104	104
Blue Ridge (State).....	8	8	16
Appomattox.....	10	..	10
Fred. and Gordonsville.....	..	..	46
A., L. and Hamp. and branch...	..	..	166
Clarksville and Ridgeway.....	25	..	25
	808	654	1,958

This list will, we think, be found very nearly correct. It will be seen that Virginia has, in round numbers, 800 miles of railway in operation; 700 building; and 500 more in the hands of organized companies, every mile of which will doubtless be made in a few years. About 250 miles will probably be added to the finished track during 1854. Besides those we have named, there are others projected, to the extent of perhaps one thousand miles or more.—*Winchester Virginian.*

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PACKED PARCELS.

By this term the English denote a collection of small packages, enclosed in a common envelope by carriers, for the purpose of being forwarded to the different parties for whom they are intended. The Court of Exchequer has been lately examining a case, in which was involved the right of carriers to have such parcels conveyed by railway upon the same terms as those enjoyed by the public generally. The case in question was that of *Crouch vs. the Great Western Railroad Company*, which was brought to recover damages by reason of defendants' refusing to carry plaintiff's packed parcels without an extra compensation of 50 per cent. above that ordinarily paid, and the plaintiff also claimed to recover over-charges to which he had been previously subjected, upon the packages of like description.

The question, upon which this case turned, had been already substantially decided against Railway Companies, in the case of *Parker vs. the Great Western Railway Company*, 11 *Common Bench Reports*, and in the case of Crouch, above mentioned. The Court adhered to their previous decision, and held that the companies were not at all likely to make any distinction between carriers or forwarders and the public at large. No ingenuity of counsel seems to have been spared in order to evade the application of the rule already explicitly laid down in opposition to their claim which they advanced. But the Court wholly discountenanced the practice of discriminating between different classes of customers having occasion to transport by railway. Indeed, common carriers undertake generally, and for all persons indifferently, to convey goods and to deliver them some appointed station for rates of compensation, which must not be modified by capricious injustice, to the detriment of the public.

In the direction of Sheffield, the Great Western Railway terminates at Rugby, and in that of Glasgow, at Preston. The defendants had endeavored to baffle the plaintiff by refusing to transport his packed parcels beyond Rugby upon the one route, or beyond Preston on the other. But the Court held, that having held themselves out to the world as common carriers to Sheffield and to Glasgow, respectively, they could not evade their obligations to transport the plaintiff's parcels to those points, although one of them was situated out of the kingdom of England. In other words, common carriers are to be considered as such for the whole route over which they undertake to convey, be it within the limits of their country or beyond it, be it wholly within the limits of their own road, or partly within them and partly beyond. The New York Supreme Court interpret the duties of common carriers in like manner, and have declared a railroad company, who contract to carry passengers and their baggage beyond the limits of their own road, are liable for losses which occur on any part of the route, in respect to which the contract is made.

It may be added, that our State Railroad Law contains a general provision, authorizing the construction of parts of lines in other States than their own. This can, however, only be done by a vote of two-thirds of all the Directors of the company proposing such extension, and then the sections of the said railroad, within this State, are to be deemed a connected line according to the articles of association.

In the case of the Great Western Railway, above mentioned, the defendants further insisted that inasmuch as the plaintiff had refused upon request to disclose to them the contents of his packages, he thereby lost his right to have them transported. But it was held that it is only essential to disclose the contents of packages when they are hazardous or when they exceed a certain value, in cases regulated by the Act of Parliament providing for the extra compensation of carriers.

But while common carriers are obliged to perform all the duties which fairly belong to their vocation, no Court will compel them to do what they are not considered as having substantially engaged with the public to do. They need not receive such goods as would be a nuisance to those availing themselves of their trains, nor are they bound to receive passengers who will not comply with their reasonable regulations, or who are guilty of grossly offensive behavior, or who are disorderly, or who use their vehicles for purposes manifestly hostile or injurious. See Story on bailments, 375.

Jeffersonville Railroad.

In a satatement of the business prospects of the Company, published in New York, in April last, it was estimated that the earnings of the Road for the year, would not be less than $128,000. It will be seen by reference to the following statement furnished by the Secretary and Treasurer, that the earnings for the year ending 31st of December, have exceeded that estimate nearly $20,000, viz :

Transportation of Passengers.....	$61,813 05
" " Freight.....	81,643 86
" " Mail Service..... ...	3,885 42
	$147,342 33

When it is recollected that the track of the road was only laid to Rockford, 52 miles, in August, 1852, and extended to Edinburgh on the 23d of December; that the track was broken, and the roadway greatly injured, by the unprecedented flood of the 24th of the same month, by which the business on more than one third of the whole line was almost entirely suspended, until March, 1853, that the Road was unfinished, the track rough and unballasted, and for a considerable part of the year had to be operated almost without turnouts or side tracks, it must be admitted that the earnings of the past year, (notwithstanding the drawbacks above mentioned,) present favorable indications of fair future business and income.

Within the past year the condition of the Road has been greatly improved, by ballasting the track, constructing turnouts, and substituting stone piers and abutments in most of the important bridges, which had, when first built, been placed on wooden structures, for want of stone accessible to the road, there being no quarries on the line affording suitable material, except those within a few miles of the Ohio river. The stone for the bridge across Flat Rock river, was carried on the Road from the Company's quarry at Silver Creek, a distance of more than sixty miles. And the gravel for ballast had also to be hauled a long distance, there being no gravel between Jeffersonville and White river, fifty-two miles, except in small quantities, which had to be carted to the road, form beds of small creeks, at heavy cost.

During the low water of the past autumn, the bridge piers and abutments have been generally well protected by placing around them large quantities of broken stone, and they are now considered in safe condition.

The extraordinary flood of last winter, which injured several Roads in Indiana, proved that the grade-line adopted by the Engineer when constructing our road, was not, at some points, sufficiently elevated to free the track at all times from inundation, and we have, during the past summer, raised the grade from one to two feet in height, and increased the width and strength of the embankments at such points as the freshet of the previous winter had shown to be defective. It was deemed of great importance to the interests of the Company to substitute stone piers and abutments in place of wooden structures, at the principal bridges, and to place the track above the highest known freshets, and prepare the Road for active business at all seasons. The whole road, except a few miles not yet ballasted, was put in good position through the summer and fall, and our passenger trains are running over it at an average speed of 30 miles per hour.

To make these improvements, and at the same time operate the Road, and keep up its regular business, required great care and attention to prevent accidents or injuries to the trains, and those employed upon the work, and with the high price of labor last year, required a heavy expenditure not included in any previous estimate.

Lumber has been purchased, and is now seasoning, preparatory to covering the principal bridges, to prevent them from decay. They are expensive structures, and it is important that this protection should not long be neglected, as exposure of the timber will in a short time render them unsafe, and their renewal would be a heavy tax, compared with the expenditure required to cover them.

The business of the Road in transportation of hogs the past season, has fallen short of our anticipations, and far below the estimate of dealers in pork, before the commencement of the slaughtering season. The whole number of hogs carried on the Road, may be estimated at 43,000. A large increase of this trade, over that of the previous year had been anticipated, and ample provision was made for it, both in motive power and rolling stock, so that with corresponding promptness on connecting lines, we could have readily carried double the number of hogs presented for transportation. The most prominent cause contributing to reduce the anticipated business from this source was the low price offered by those engaged in that traffic. Much of the crop of last season, part in barrelled pork, and the residue in bacon, after it shall have been cured, has yet to find its way to market and the carrying of this product will be distributed through several months, instead of being confined to the slaughtering season.

We have purchased the last year, six first class locomotives, four of which were placed on the road preparatory to the business of the fall and winter; the other two are finished, awaiting the settlement of the Erie difficulty, when they will be sent forward. Upon the receipt of these, we shall have on the Road and branch, nineteen locomotives; and no further expenditure will probably be required for the purchase of motive power for the road now constructed, for two or three years.

To accommodate the increase of freight and travel upon the line, it will be necessary to add largely to our stock of freight cars, the approaching spring and summer, and to the stock of passenger cars, at least a sufficient number to fit out an extra train, whenever it may be thought necessary to do so; and this contingency will probably often occur after the connection is completed of the Ohio and Mississippi Road, from Cincinnati to our line. The ballasting of the unfinished portion of the road, will be completed early in the summer. The track should be re-spiked and surfaced, and the entire line from Jeffersonville to Edinburgh, will then be in such condition, that a high rate of speed (sixty miles per hour,) may, if necessary, be attained, with as little hazard to the safety of the trains, as upon any road in the country.

In the expenditure of the past year, charged to construction account, is embraced the outlay for the engine shop and car shop, erected at Jeffersonville. These are substantial two-story brick buildings, and with small additional outlay for

tools, will add greatly to our facilities for the economical repair of engines, and the construction and repair of cars. Nearly all the freight and platform cars in use on the road, all the baggage and express cars, and part of the passenger cars, have been built at our own shops, at greatly reduced cost, from the prices charged for the same quality of stock procured from other shops.

Cost of Road from Jeffersonville to Edinburgh, seventy-eight miles, inclusive of engines and rolling stock, to 31st December, 1853..	$1,186,118 49
Average cost per mile, $15,207 00	
Locomotives and rolling stock on same....	233,499 92
	$1,419,681 41
Cost of Shelbyville Road, 16 miles, with expenditure for new track, engines and rolling stock.....	275,578 37
For locomotive and cars on Rushville Road paid by this Company	8,101 69
Total expenditure for 94 miles and equipment....	$1,703,298 47
Average per mile, including equipments, $18,120 00	
The capital stock of the Company issued to the 1st of January, 1854, is 961,222 91.	
Earanings of the Road to same date, including excess of receipts for four months of 1852.....	$179,683 28
Running expenses, stationery, interest, (including interest on Road bonds, and bonds of the cities of Louisville and Jeffersonville paid by this Company,) exchange, repairs of machinery, salaries, taxes, &c.,....	120,023 62
Balance nett earnings....	$59,659 66

On the 28th of January, a dividend of six per cent. was ordered to be paid in stock from the nett earnings of the Road, to 1st of January, 1854, which on the capital stock abeve stated, will amount to $57,673 37, and will leave a balance of net earnings, of $1,965 29.

The expenses above stated compared with the gross earnings of the past year, may appear large and disproportioned. The deduction from gross earnings includes not only the interest upon all the road bonds and city bonds sold by the Company, printing, stationery, salaries of officers, depot clerks, station agents, train hands, repairs of machinery, and all other running expenses, in transportation of freight and passengers, but includes also, the expenses on account of hauling ballast, rock and other material for the roadway and in filling up depot grounds at Jeffersonville, and also includes the expenditure for a large quantity of wood paid for, which will be used the present year, while at the commencement of the year, there was very little wood on hand. The expenses properly chargeably to operating the Road, will hereafter be greatly reduced, in proportion to gross and nett earnings heretofore shown.

The present liquidated unfunded debt amounts to $87,354 39. This sum will be somewhat increased by the contracts which are being executed for machinery etc., and by the settlement of unadjusted accounts. When all the contracts of the Company shall have matured, the floating debt may be increased to a sum not exceeding $160,000. A large portion of the floating debt is created in the purchase of cross-ties, spikes, chairs, and heavy T rail for the Shelbyville branch and in relaying the track, which was originally constructed with a plate rail. With it, are connected at Shelbyville, the Knightstown Road, 27 miles in length, and the Rushville, 20 miles. The two latter Roads are under lease to the Shelbyville Branch and their business during the unexpired term of the lease, is to be done over the Shelbyville Road. Its thorough repair having become necessary, the directory decided that the better mode of repair was to relay the track with a heavy rail, about two-thirds of which is completed. While this improvement has increased the cost of the Road, it has at the same time added to the security of the last issue of Bonds, for the amount of iron and other expenditures incurred.

We now own 94 miles of road in operation, and control by lease 47 miles of connecting Roads.—The business and earnings of the Shelbyville Road have heretofore been kept separate and distinct from those of the Jeffersonville. It is intended hereafter to place the whole under one control and management. This will at least save the expense of one set of officers, and will doubtless in other respects be to the interest of the stockholders in the main line. The expenditure on the Road between Jeffersonville and Edinburgh to the 31st of December last, for construction of way, real estate, salaries, interest, discount on bonds, exchange, motive power, rolling stock, depot buildings, shops, &c., is $1,419,681 41, and including the Shelbyville Road, together with the expense of relaying the track with T. rail, and also the locomotives and rolling stock purchased from branch roads, is $1,703,298 47.

The extension of the Indiana Roads to the Lakes the past year was consumated too late to add materially to the earnings of this road. The connections now afforded by roads from Indianapolis to Lake Erie and the Eastern Cities, by lines through Central and Northern Ohio, with which arrangements for through business have been made, will add greatly to the general business of the Jeffersonville Road. The outlet recently opened to Lake Michigan and Chicago is already inducing considerable travel and trade over our line in that direction, and this must be vastly increased upon the completion of the Louisville and Nashville Road which will constitute the Jeffersonville Road a connecting link between the North and South.

Notwithstanding the drawbacks before referred to, the business of the past year exceeded the estimate of the Company as before shown. These earnings were produced mainly from local business, as our connections with other lines and arrangements for through travel and freights were not perfected in time to add much to our general business for the year just closed. Upon all Roads the operations for the first year are always embarrased by contingencies which no foresight can guard against, and which experience only can discover and overcome. It also requires time for business to adapt itself to new channels opened for outlets of surplus products to market, and the same may be said in reference to new routes for travel; time is required for the route to become known before it can command attention and patronage, and its business for a few months only, cannot be taken as the measure of its future usefulness and profit.

We shall commence the business of the second year freed frem many disadvantages under which the business of the past year was prosecuted, and may justly calculate upon a large increase of local traffic as well as through business, in connection with roads now in operation.

One of the most important sources of new business will be the Ohio and Mississippi Road which will shortly be opened from Cincinnati to the Jeffersonville Road, 50 miles from our southern terminus. As soon as this connection is completed, the two roads will form the great route of travel between Louisville and Cincinnati. It is estimated that there are at least 500 passengers daily between these cities. The charge by the boats is $2 50 per passenger, and the time is from 10 to 17 hours, subject to frequent vexations delays, and at times to total interruption from ice and low stages of water in the Ohio. The time by railroad will be reduced to six hours between those cities, and the fare about the same as charged by the boats. There is also a vast amount of commerce between those two cities, much of which will be performed by railroads. When this connection is completed these roads will form an important part of a line of one of the great routes of travel and commerce between the South and the North, and the Jeffersonville Road must form the best extension to Indianapolis and to Lake Michigan and Chicago. Within two years from the present time the Jeffersonville Road will form an important part of one of the greatest Northern and Southern lines of railroad in the United States.

The operations of the road for the first year not only show a satisfactory result in itself, but equally so when compared with similar works in the West. The earnings of the Cincinnati, Hamilton and Dayton Road, with a line of 60½ miles, the first year, were $241,426 00, or $3,990 00 per mile. This was on a capital invested, of $2,659,653 00. Were the earnings of the Jeffersonville Road only $129,000 00, it would be equivalent to this, if we compare the two investments. The earnings of the Eaton, Hamilton, Richmond and Miami line, 69 miles, for the first year were $121,114 00 or $1,755 00 per mile. The Indianapolis and Bellefontaine road, 84 miles, cost $1,600,000 00. Its gross earnings the first year were $150,500 00, or 1,793 00 per mile. The earnings of the Terre Haute Road the first year, with a mileage of 72 miles, were $105,943 00, or $1,472 00 per mile. The earnings of the Jeffersonville Road, upon a mileage of 78 miles, were $147,342 00, or 1,900 00 per mile. The total cost of the two latter roads, including equipments, are very nearly the same, the difference being say $5,000.00. The Terre Haute is well known to be one of the highest priced Western stocks. A comparison with the first year's operations of other roads, it is believed, would show results equally favorable to this road.

No accurate estimate can be made of the business of the road for the present year; that it will greatly exceed that of the past, cannot be doubted. The annual increase of business on new roads is very great. The gross receipts of the Terre Haute, the second year, to 31st December last, were $177,976 00, and increase of more than 70 per cent. A similar rate of increase in the earnings of the Jeffersonville Road will make its receipts for the present year more than $250,000 00. The earnings in January 1853, were only $4,735 44; returns of the business in January 1854, have not been received from all the stations, nor from roads with which we have arrangements for through business, but enough is now known at the principal office to induce the belief that the earnings for the month have been about $18,000 which would be an increase of more than $13,000 over the earnings of the corresponding month of the previous year, and furnishes an indication that the business of the road the present year will not be less than $250,000. It is confidently believed that if the floating debts of the Company were now funded, the earnings of the road after paying running expenses, and interest upon the funded debt, will be such as to enable the Company to pay fair cash dividends to the stockholders, and create a fund to retire the mortgage bonds issued by the Company as they become due.

The funded debt for the issue of bonds, to mature in 1861, is.....	$289,000
For those to mature in 1873.....	300,000
Total Road bonds sold...	$589,000

Since the last annual report, a temporary arrangement has been made with the Madison and Indianapolis Company, for the joint use of its track, from Edinburgh to Indianapolis, a distance of thirty miles. Negotiations are pending for the purpose of making a permanent arrangement. As the route for this distance is common to both lines, and as one road may be made to afford all the necessary accommodations to both Companies, by laying down hereafter a double track on the same right of way and same grade, it is the dictate of prudence and common sense to enter into some mutual arrangement which shall save a large expense to both Companies. To accomplish such a result, the Jeffersonville Company are disposed to propose liberal terms to the other Company. Should however all efforts to effect a fair and satisfactory arragement fail, the Jeffersonville

Company will at the expiration of the present temporary contract, proceed at once to continue their line to Indianapolis. The country traversed by the line of extension is deeply interested in having ready access to the City of Louisville. That interest was clearly manifested during the prosecution of the surveys, by the tender of additional subscriptions to our stock, for the purpose of constructing the graduation. The same motive power and rolling stock necessary for the present road would do the business on the entire line with comparatively little or no additional expenditure for equipment. That the business of the Jeffersonville Road will, with the important lines soon to be connected with it from the South, require the extension to Indianapolis of an independent line, or such arrangement as will place us in a position equally favorable there can be no doubt.

WM. G. ARMSTRONG, President.

February 3d, 1854.

American Railroad Journal.

Saturday, March 4, 1854.

Stock and Money Market.

The improvement noticed last week is fully sustained. The stock market shows a good deal of firmness, with an upward tendency. There has also been a better demand for securities, particularly on foreign account, which is exciting a favorable effect upon our money market. First class Bonds are gradually working off. The sale is still limited, but the rapid curtailment of expenditures upon railroads, has lessened the demand for money, but not in equal ratio. On the whole, there has been a decided improvement since the new year, and as many believe, a still better prospect for the future.

The following is a detailed statement of the deposits and coinage of the Mint for the month of February:

Gold Bullion deposited—

From California	$2,461,000
From other sources	53,000
Total deposits in Feb	$2,514,000
Total deposits in Jan	4,215,579
Silver Bullion deposited	1,166,000

GOLD COINAGE.

	Pieces.	Value.
Double Eagles	154,297	$3,085,940

SILVER.

Half Dollars	274,000	$137,000
Quarter Dollars	1,240,000	310,000
Dimes	130,000	13,000
Total	1,644,000	$460,000

COPPER.

Cents	$1,222 17
Total coinage of Gold	$3,085,940 00
Total coinage of Silver	400,000 00
Total coinage of Copper	1,222 17
Total	$3,547,162 17

The deposits of the year, thus far, compare with those of last year as follows:

	1853.	1854.
January	$4,962,962	$4,215,579
February	3,584,523	2,514,000
Total in 2 months	$8,547,485	$6,729,570

The falling off from last year, owing to the severity of the rainy season in California, is quite large, but it will probably be made up in future supplies.

The exports of specie since January 1st, have not exceeded $3,000,000, while the receipts of gold dust have been nearly $7,000,000; showing a balance in favor of the country of $4,000,000.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of $100.

NAME OF COMPANY.		Miles open.	Capital paid in.	Funded debt.	Tot. cost of road and equipm't.	Gross Earnings for last official year.	Net Earnings for last official yr.	Dividend for do	Price of Shares.
Atlantic and St. Lawrence...	Maine.	150	1,538,100	2,973,700	5,150,278	254,743	113,520	none	83
Androscoggin and Kennebec..	"	55	809,878	1,016,500	2,064,458	140,561	80,053	none	30
Kennebec and Portland..	"	72	952,621	29[illegible],80	2,514,067	168,114	100,552	none	41
Port., Saco and Portsmouth..	"	51	1,355,500	123,884	1,459,384	208,669	.....	6	98½
York and Cumberland,.....	"	20	285,747	341,100	713.605	23,946	11,256	none	24
Boston, Concord and Montreal.	N. H.	93	1,649,278	622,200	2,540,217	150,538	79,659	none	32
Concord	"	35	1,485,000	none.	1,485,000	305,805	141,836	8	110
Cheshire	"	54	2,078,625	720,900	3,002,094	287,768	55,266	5	38
Northern	"	82	3,016,634	.....	.....	328,782	163,075	5	59
Manchester and Lawrence....	"	24	717,543	.....	.....	.....	.....	6	91
Nashua and Lowell.....	"	15	600,000	none.	651,214	132,545	51,513	8	109
Portsmouth and Concord....	"	47	.....	.....	1,400,000	.....	.....	none	....
Sullivan.....	"	26	.....	.....	673,500	.....	.....	none	21
Connecticut and Passumpsic..	Vt.	61	1,097,600	550,000	1,745,516	.....	.....	none	27
Rutland	"	120	2,486,000	2,429,100	5,577,467	495,397	266,539	none	9½
Vermont Central.....	"	117	8,500,000	3,500,000	12,000,000	.....	.....	....	13
Vermont and Canada.....	"	47	1,500,000	.....	1,500,000	Leased to the Vt. C		ent.	97
Western Vermont.....	"	51	392,000	700,000	.....	Recently	opened.	none	....
Vermont Valley	"	24	.....	.....	.....	.....	.....	none	....
Boston and Lowell.....	Mass.	28	1,830,000	.....	1,995,249	388,108	130,881	7	91
Boston and Maine.....	"	83	4,076,974	150,000	4,092,927	659,001	338,215	7	103
Boston and Providence.....	"	53	3,160,390	390,000	3,546,214	469,656	227,434	6	84
Boston and Worcester.....	"	69	4,500,000	425,000	4,845,967	758,819	331,296	7	100½
Cape Cod branch.....	"	28	421,295	171,800	633,906	60,743	30,056	2	40
Connecticut River.....	"	52	1,591,100	193,500	1,801,946	229,004	72,028	5	55
Eastern.....	"	75	2,850,000	500,000	3,120,391	488,793	241,017	7	87½
Fall River.....	"	42	1,050,000	none.	1,050,000	229,445	99,589	8	99
Fitchburg.....	"	66	3,540,000	112,305	3,623,073	574,574	232,787	6	91½
New Bedford and Taunton..	"	20	500,000	none.	520,475	164,230	43,950	7	117
Norfolk County.....	"	26	547,015	819,743	1,245,927	67,251	23,415	none	68
Old Colony.....	"	45	1,964,070	282,300	2,293,534	374,897	122,816	none	87
Taunton Branch.....	"	12	250,000	none.	307,136	137,406	24,399	8	....
Vermont and Massachusetts..	"	77	2,140,536	1,001,500	3,203,333	218,679	18,648	none	21½
Worcester and Nashua.....	"	45	1,134,000	171,210	1,321,945	162,109	66,900	4	59
Western	"	155	5,150,000	5,319,520	9,953,759	1,525,224	746,736	7	97
Stonington.....	R. I.	50	.....	467,700	.....	240,572	110,892	....	65½
Providence and Worcester...	"	40	1,457,500	300,000	1,791,999	291,417	120,892	6	97
Canal.....	Conn.	45	922,500	500,000	1,400,000	.....	.....	4	65
Hartford and New Haven....	"	72	2,350,000	800,000	3,150,000	639,529	294,269	10	129
Housatonic.....	"	110	.....	.....	2,500,000	329,041	168,902	none	....
Hartford, Prov. and Fishkill..	"	50	.....	.....	In progres	69,629	.....	none	....
New London, Wil. and Palmer	"	66	558,861	800,000	1,511,111	114,410	.....	....	39
New York and New Haven...	"	61	3,000,000	1,641,000	4,978,487	806,713	428,173	7	102½
Naugatuck	"	62	926,000	440,000	.....	.....	.....	8	....
New London and New Haven.	"	55	750,500	650,000	1,380,610	Recently	opened.	none	40
Norwich and Worcester..	"	54	2,121,110	701,600	2,596,488	267,561	116,965	4	57½
Buffalo and New York City..	N. Y.	91	900,000	1,550,000	2,550,500	Recently	opened.	none	....
Buffalo, Corning and N. York.	"	132	.....	.....	In progres	.....	.....	none	65
Buffalo and State Line.....	"	69	879,636	872,000	1,921,270	Recently	opened.	....	130
Canandaigua and Niagara F..	"	50	.....	.....	In progres	.....	.....	....	....
Canandaigua and Elmira.....	"	47	425,509	582,400	987,627	76,760	39,360	none	68
Cayuga and Susquehanna....	"	35	687,000	400,000	1,070,786	74,241	23,496	none	....
Erie, (New York and Erie)...	"	464	10,000,000	24,003,865	33,070,863	4,318,962	1,800,181	7	81½
Hudson River.....	"	144	3,740,515	7,046,395	10,527,654	1,063,659	338,783	none	70½
Harlem	"	130	4,725,250	977,463	6,102,935	681,445	324,494	4	57
Long Island.....	"	95	1,875,148	516,246	2,446,391	205,068	44,070	none	34
New York Central	"	504	23,085,600	10,773,823	33,859,423	.....	.....		111½
Ogdensburgh (Northern).....	"	118	1,579,969	2,969,760	5,133,834	480,137	195,847		29½
Oswego and Syracuse.....	"	35	350,000	201,500	607,803	90,616	43,609		70
Plattsburg and Montreal....	"	23	174,042	131,000	349,775	Recently	opened.	none	....
Rensselaer and Saratoga....	"	25	610,000	25,000	774,495	213,078	96,737	....	....
Rutland and Washington.....	"	60	850,000	400,000	1,250,000	Recently	opened.	....	....
Saratoga and Washington....	"	41	899,800	940,000	1,832,945	173,545	135,017	none	30
Troy and Rutland.....	"	32	237,690	100,000	329,577	Recently	opened.	....	33
Troy and Boston.....	"	39	430,936	700,000	1,043,357	Recently	opened.	none	....
Watertown and Rome.....	"	96	1,011,940	650,000	1,693,711	225,152	116,706	8	96
Camden and Amboy.....	N. J.	65	1,500,000	.....	4,327,499	1,888,385	478,413	10	148
Morris and Essex.....	"	45	1,022,420	128,000	1,220,325	149,941	79,252	7	....
New Jersey.....	"	31	2,197,840	476,000	3,245,720	603,942	316,259	10	131
New Jersey Central.....	"	63	986,106	1,500,000	2,379,880	260,899	124,740	3	....
Cumberland Valley.....	Penn.	56	1,184,500	13,000	1,265,143	118,617	76,890	5	....
Erie and North East.....	"	20	600,000	.....	750,000	Recently	opened.	....	125
Harrisburgh and Lancaster...	"	36	830,100	713,227	1,702,523	265,327	106,320	8	55
Philadelphia and Reading....	"	95	6,656,332	10,427,800	17,141,987	2,480,626	1,251,987	7	80
Philad., Wilmington and Balt.	"	98	5,000,000	2,399,166	8,067,285	868,038	541,769	5	80

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of $100.

NAME OF COMPANY.		Miles open.	Capital paid in.	Funded debt.	Tot. cost of road and equipm't.	Gross Earnings for last official year.	Net earnings for last official yr.	Dividend for do.	Price of shares.
Pennsylvania Central	Penn.	250	9,768,155	5,000,000	13,600,000	1,943,827	617,625	....	97
Philadelphia and Trenton	"	30	....	....	....	....	....	....	....
Pennsylvania Coal Co	"	47	....	....	....	....	....	....	102¼
Baltimore and Ohio	Md.	381	13,118,902	5,677,103	22,254,338	2,033,420	798,193	7	58
Washington branch	"	38	1,650,000	....	1,650,000	348,622	216,237	8	....
Baltimore and Susquehanna	"	57	....	....	....	413,673	152,536	....	..
Alexandria and Orange	Va.	65	....	....	In prog.	....	....	....	....
Manassas Gap	"	27	....	....	In prog.	....	....	....	....
Petersburgh	"	64	769,000	173,867	1,163,928	227,593	72,370	7	77
Richmond and Danville	"	73	1,372,324	200,000	In prog.	....	....	....	70
Richmond and Petersburgh	"	22	685,000	....	1,100,000	122,861	74,113	none	40
Rich., Fred. and Potomac	"	76	1,000,000	503,006	1,531,238	254,376	113,256	7	100
South Side	"	62	1,357,778	640,000	2,106,467	62,762	....	....	....
Virginia Central	"	107	1,673,684	469,150	2,392,215	210,052	99,077	10	50
Virginia and Tennessee	"	73	2,650,091	707,958	3,545,256	109,268	42,736	none	98
Winchester and Potomac	"	32	180,000	120,000	416,532	89,776	....	12	....
Wilmington and Raleigh	N .C.	161	1,338,878	1,134,698	2,965,574	510,038	153,898	6	....
Charlotte and South Carolina	S. C.	110	....	....	....	....	....	....	....
Greenville and Columbia	"	140	1,004,231	300,000	In prog.	....	....	....	....
South Carolina	"	242	3,858,840	3,000,000	7,002,396	1,000,717	609,711	7	125
Wilmington and Manchester	"	...	....	....	In prog.	....	....	....	....
Georgia Central	Ga.	191	3,500,000	418,187	3,465,879	986,074	535,608	8	115
Georgia	"	211	4,000,000	1,214	....	934,424	456,468	7½	....
Macon and Western	"	101	1,013,088	163,000	1,277,334	278,739	149,960	9	101
Muscogee	"	71	....	....	In prog.	59,590	21,731	....	....
South Western	"	50	586,887	150,000	743,525	129,395	71,535	8	....
Alabama and Tennessee River	Ala.	55	....	....	In prog.	....	....	....	....
Memphis and Charleston	"	93	776,259	400,000	In prog.	....	....	....	....
Mobile and Ohio	"	33	879,868	....	In prog.	....	....	....	....
Montgomery and West Point	"	88	688,611	....	1,330,960	173,542	76,079	8	....
Southern	Miss.	60	....	....	....	....	....	....	....
East Tennessee and Georgia	Tenn.	80	835,000	541,000	In prog.	....	....	....	....
Nashville and Chattanooga	"	125	2,093,814	850,000	In prog.	....	....	....	....
Covington and Lexington	Ky.	38	1,430,150	900,000	In prog.	....	....	....	63
Frankfort and Lexington	"	29	357,218	....	584,902	87,421	44,250	....	80
Louisville and Frankfort	"	65	....	....	....	....	....	....	....
Maysville and Lexington	"	...	....	....	In prog.	....	....	....	45
Cleveland and Pittsburgh	Ohio.	100	1,979,100	1,142,200	3,279,908	432,682	267,278	10	91
Cleveland and Toledo	"	147	2,000,000	1,600,000	....	....	....	....	101
Cleveland, and Erie	"	95	....	....	....	....	....	....	....
Cleveland and Columbus	"	135	3,027,000	408,200	3,655,000	777,793	483,454	12	121
Columbus, Piqua and Indiana	"	46	....	....	2,000,000	....	....	....	65
Columbus and Lake Erie	"	61	....	....	....	....	....	....	....
Cincinnati., Ham. and Dayton	"	60	2,100,000	500,000	2,659,653	321,793	200,967	....	104¼
Cincinnati and Marietta	"	...	....	....	In prog.	....	....	....	62
Dayton and Western	"	40	310,000	550,000	925,000	Recently	opened.	....	75
Dayton and Michigan	"	20	....	....	In prog.	....	....	....	....
Eaton and Hamilton	"	36	....	....	....	....	....	....	56
Greenville and Miami	"	31	....	....	....	....	....	....	....
Hillsboro	"	37	....	....	In prog.	....	....	....	....
Little Miami	"	84	2,668,402	482,000	3,169,733	667,559	352,133	10	109¼
Mansfield and Sandusky	"	...	900,000	1,000,000	1,855,000	....	....	....	....
Mad River and Lake Erie	"	167	2,387,200	1,767,000	4,110,148	540,518	113,401	....	77½
Ohio Central	"	57	....	....	In prog.	....	....	....	79
Ohio and Mississippi	"	...	....	....	"	....	....	....	....
Ohio and Pennsylvania	"	187	1,750,700	2,450,000	....	Recently	opened.	....	....
Ohio and Indiana	"	...	....	....	In prog.	....	....	....	....
Scioto and Hocking Valley	"	44	750,000	300,000	"	Recently	opened.	....	....
Xenia and Columbus	"	54	1,291,000	300,000	1,257,714	317,000	158,500	10	107
Evansville and Illinois	Ind.	31	....	....	In prog.	237,506	....	....	....
Indiana Central	"	...	....	....	"	....	....	....	77½
Indiana Northern	"	131	....	....	"	....	....	....	115
Indianapolis and Bellefontaine	"	83	....	....	"	Recently	opened.	....	87
Indianopolis and Cincinnati	"	90	1,128,486	1,289,000	1,869,932	Recently	opened.	....	72
Lafayette and Indianapolis	"	62	....	....	....	....	opened.	....	....
Madison, Indianapolis & Peru	"	138	2,647,700	1,241,300	2,400,000	516,414	268,075	10	70
Peru and Indianapolis	"	40	....	....	In prog.	....	....	....	65
Terre Haute and Indianapolis	"	72	632,387	663,100	1,353,019	105,944	71,446	4	108
Rock Island and Chicago	Ill.	...	....	....	....	....	....	....	....
Chicago and Mississippi	"	135	2,400,000	4,000,000	4,600,000	....	....	....	....
Illinois Central	"	...	....	....	....	....	....	....	....
Galena and Chicago	"	92	1,932,361	500,000	In prog.	473,548	286,152	....	118
Michigan Southern and Ind. N.	Mich.	315	2,800,000	3,741,564	7,276,616	1,200,922	586,929	17	119¼
Michigan Central	"	282	4,856,700	3,977,563	8,618,505	1,145,598	582,816	8	105
Pacific	Mo.	38	1,000,000	none.	In progres	Recently	opened.	....	....

Edwin F. Johnson upon the Pacific Railroad.

We have published, and have for sale, E. F. Johnson's recent work upon the Pacific Railroad. Mr. Johnson is admitted to be one of the first Engineers in this country, and his reputation is a good guaranty that the subject under discussion has been thoroughly considered and discussed. The work is illustrated by a large map, showing all the proposed routes, a profile of the Northern Route, a map of the mountain chain traversed by it, and seven lithographic views of various points upon its line. The whole work is elegantly got up, and makes a volume of 176 Pages, Octavo.

Persons wishing to procure copies of the above work, by forwarding one dollar to our address, can have a copy of the same with the maps, forwarded by mail post paid.

Duty on Railroad Iron.

The meeting, to take into consideration the subject of the removal of the duty on railroad iron, notified in our last week's paper, was held on Saturday evening, at the Astor House, in this city. About 30 companies, numbering some of the largest and most influential in the United States, were represented. A committee of five, consisting of Hon. Samuel F. Vinton, Noah L. Wilson, John Striker, George Ashmun, and Henry V. Poor, was appointed to take the matter in charge, who were, by resolution, "requested and empowered to take such measures for the removal of the duty on railroad iron, as they may deem expedient and proper; and especially that by memorial, or otherwise, they cause this subject to be brought before the Congress of the United States at as early a day as practicable."

We learn that the committee have already taken steps to secure the co-operation of the railroad companies throughout the country, without which, there is little prospect that the proposed repeal of the duty can be effected. This done, they will immediately bring this subject to the attention of Congress.

Michigan Central Railroad Co.'s Boats.

The Central Company are building two boats to form their lake connection on the opening of navigation. For size, accommodation and luxurious finish these will surpass anything on Western waters, and the chief points anything *now* running on the Hudson River or Long Island sound. The length of each of these boats is 348 feet; depth of hold 15 feet; breadth of deck across guards 72½ feet. Engines, 81 inch cylinder, 12 feet stroke and 1500 horse power. Wheel 39 feet face; buckets 11 feet width. There are 127 slate rooms, of which 64 contain double beds.

The engines are building at the Allaire Works of this city. The boats completely finished, are expected to cost $250,000 each. Their names are *Plymouth Rock* and *Western World*.

Erie Railroad--Change of Officers.

The Superintendent of this road, Charles Minot Esq., has resigned, and will leave his post about the first of May. His place is to be filled, we understand, by D. C. McCallum Esq., of Owego, formerly a Division Superintendent.

We also understand that Mr. McAlpine has virtually left the road, though he may still be nominally in the employ of the company.

East Tennessee and Virginia Railroad.

We have received the fourth annual report of the Directors of this road, and gather from it the following pa iculars of its progress and condition.

A new organization of the Engineer force has been made, under which M. Lynch is Chief, and Robert L. Owen and Robert C. Morris Principal Assistant Engineers.

Much of the line has been placed on a new location, for the reduction of grades, etc. The work of construction is steadily progressing. The Eastern division from the Virginia line to Bull's Gap, 74⅞ miles, it is estimated can be finished during the present year. The Western division, from Bull's Gap to Knoxville, is about one third graded and the masonry nearly one half completed. The whole road is 130⅜ miles long, and is estimated to cost as follows:

Graduation	$537,808
Masonry	168,053
Bridge Superstructure	72,129
Ties, track laying and contingencies	120,908
Total for Road-bed, exclusive of iron	$898,898

The bonds of the State to be issued at $8,000 a mile, with the successive opening of each 30 miles of the road, are relied on to provide iron and equipments.

The payments made on account of construction, including 20 per cent. retained on work in progress, up to Nov. 24th, 1853, were about $318,000, leaving $580,898 to be expended, to prepare the roadway for the iron. The Balance due and means in hand are $573,658 50; which as $193,976 of work in hand is made payable in stock, leaves a balance of assets over estimates of $186,736 50; believed to be sufficient to meet loss upon stock, land damages, and discount upon County Bonds.

The grade of the road is as follows:

Level,	13 miles,	3,249 feet.
0 to 20 feet,	14 "	260 "
20 " 40 "	18 "	3,010 "
40 " 60 "	23 "	1,912 "
60 " 68 "	60 "	5,079 "
Total,	130 "	2,950 "

Two lines have been examined with reference to connections with Norfolk, Va., and Charleston S. C.

One, leaving the E. T. & V. R. R. 6½ miles east of Jonesboro' passes to the summit of the Blue Ridge in North Carolina, 60 miles, and thence to Morgantown, Raleigh and to Norfolk; making a line of about the same length as that via the Virginia and Tennessee and Norfolk and Petersburg roads. A saving of 30 miles can be made in the North Carolina route, by a connection of the Central road at Hillsboro with the Gaston road at Henderson N. C.

The other line, looking towards a connection with Charleston, leaves the E. T. & V. R. R. ½ mile west of Greenville, and extends 60 miles to Ashville, N. C. From Ashville to Norfolk, with the Central and Gaston connection before named, the distance is 381 miles, or 20 miles nearer than by the Virginia route. From Ashville, via Spartarnsbug and Columbia, to Charleston is 324 miles.

Resignation.

John Brough, Esq., has resigned the Presidency of the Madison, Indianapolis and Peru Railroad, and has been succeeded by Dr. E. W. H. Ellis, of Indianapolis.

"Railway Machinery."

We have Parts 21 and 22 of this work, received at the hands of George Falconer, Esq., Agent for Blackie & Sons, 117 Fulton street. We have before expressed our opinion of this work and need say but little more than to reaffirm it. The work presents a consecutive *exhibit* of the entire structure and principles of the locomotive. It does not deal in *opinions*, nor in vague masses of undigested matter, but in strict principles, and their practical application. It is *authority* for the builder, engineer, master mechanic, operative, and student; and what work can be more? In perfection of execution and profusion of illustrations it ranks above any similar work. With two or three numbers more it is expected to be completed, when there may be greater difficulty than at present in filling complete sets. We invariably advise our engineering friends to procure and study "Clark." The 8th number of the Engineers' and Machinists' Drawing Book is also received by the same agency, in style corresponding with "Railway Machinery."

New Locomotive--"Superior."

With our present issue we give a fine representation of the locomotive engine "Superior," just completed by the New York Locomotive Works, for the Hudson River Railroad, and noticed in another column of the *Journal*. Those who are acquainted with such work, will perceive an excellent combination of favorable features, such as will establish a good reputation for the builders, besides adding materially to the working facilities of the road for which it has been designed and constructed. Very few engines have been built in this country having a better combination of durability, lightness, beauty, and power for high and long continued speed.

Affairs at Erie.

There appears to be good reason to believe that the recent difficulties at this place are in a fair way of being satisfactorily disposed of. The Erie and North East Company have changed their gauge as authorized by *law*. Governor Bigler has recommended that a competent charter be given to the Franklin Canal Company's road, which has a similar gauge. These two roads run to each other, but are not yet allowed to connect, so that cars can run from one to the other. The issue, however, is narrowed down to a single point, and common sense must decide the matter. The absurdity of compelling freight to break bulk, when the two gauges are the same, is too palpable to be tolerated, so soon as reason can have time to exercise her sway. We are happy to announce so favorable a conclusion to this unpleasant controversy.

Pacific Railroad of Missouri.

The balance of this road from the city of Jefferson to the West line of the State, is advertised for letting, as will be seen by reference to another column of the Journal.

Grand Trunk Railroad of Canada.

Messrs. D. A. Macdonald, Ronald Macdonald, and A. F. Macdonald have taken the contract for building that portion of the Grand Trunk Railroad from Point St. Charles, at Montreal, to Charlesville—the Eastern boundary of the Township of Osnabruck—extending over a distance of one hundred and ten miles.

Ogdensburgh, Clayton and Rome Railroad.

We understand that the two sections in Jefferson County of about thirteen miles in length which were not put under contract at the first letting, were let on the 16th instant and the whole line of the road is now under contract for grading, masonry, bridging, &c., the whole to be completed by the first of Sept. next and at a cost of less than one million of dollars, being about one hundred and twenty miles in length.

The Contractors are pushing forward this work vigorously having at least one thousand men employed in grading, &c., through the whole of the line.

The subscription to the capital stock is over one million of dollars, the right of way has been to a very large extent secured and depot grounds at the various points have been purchased.

There is no longer believed to be any doubt of the completion of this important enterprize not only important to those residing on the line of the road but vastly important to the citizens and business men of New York City, it being the most direct outlet for freight and travel for Northern New York and a large portion of Canada.

Air Lines.

In the "old countries," crowded with population, railroads are made to conform to the existing state of things. With us it is different. Air line roads are now becoming the great desiderata in America, and the nearest approach to a straight line between any two great points is considered the nearest approach to perfection in railroading, other things being equal. We give below a table of distances on some of the important railroads in the States of New England and New York.

Name of Road.	Length in Miles.	Air Line between Places.	Difference in Miles.	Loss in proportionate Distances.
				Miles.
Eastern Railroad Portland to Boston.	105	99	6	1 in 16½
New York & Boston, (air line) Boston to New Haven	135	120	15	1 in 8
Boston & New York Central, Boston to New Haven	158½	128	38½	1 in 3 1-9
N. H., Hartford, Springfield & Worcester, Boston and New Haven	160	120	40	1 in 3
Western Railroad, Boston to Albany.	200	138	62	1 in 2 2-9
Central Railroad, Albany to Buffalo	320	274	46	1 in 6
New York & Erie Railroad, N. Y. to Dunkirk	460	304	156	1 in 1 18-19

That new "air line," the "Boston & New York Central" is thus made up.

Midland	11 miles.
Norfolk County	25 "
Southbridge & Blackstone Thompson	22½ "
Norwich & Worcester	37 "
New London, Williamantic & Palmer	13 "
New Haven & New London	50 "
	158½ mls.

The distances above given have been taken from the published statement of the companies, and the air lines between these places very carefully calculated by their latitude and longitude on

the arc of the circle of the earth. It will be seen that some of our railroads are very serpentine, and snake-like in their shape, and it is a little curious that the combination of roads, recently christened the "Boston & New York Central Railroad," and which we see designated as an "air line," is actually one of the most circuitous, losing in its course one mile in every 8 1-9 miles of distance, in its efforts to make a *straight line* between Boston and New Haven.

The straightest railroad in New England, for its length, so far as we are acquainted, is our "Eastern Road." It will be seen that it is only six miles less than an air line, following the cost almost the entire distance, and but for the deviation from its original line, might have been constructed nearly on a straight line.

The road which next comes nearest to an actual *air line* is the "New York & Boston," and it was upon this that the name of "Air Line" was first bestowed, and it only looses one mile in eight; the "Central," from Albany to Buffalo, being next in perfection of distance as it loses one mile in every six.

People are never content till they can reduce the time, and the cost, of travel, to its lowest unit. —*State of Maine.*

Railroads in Missouri.

"If we are not deceived, our Railroads look now in a better condition than at any period since their commencement. We have stated elsewhere, that the Pacific Railroad Company has determined to put under contract the whole of the line of that road from Jefferson City to Jackson county. Contracts have already been made for the line to Jefferson City, and men are actively engaged upon it. By the time the spring fairly opens, the company can have the whole of the balance under contract.

But we are glad to see that the Directors have gone an important step further. They have resolved to commence the construction of the entire South Western Branch, from Fanklin to the boundary of the State in that direction; and for that purpose have directed its offices to contract with a New York Company for the building of the whole road. We are given to understand, that this Company have great experience in the business, that their financial arrangements will justify them in the undertaking, and that, on the other hand, it is a fair and equitable bargain for the Railroad Company. The public are aware that the Company own 1,200,000 acres of land on the route of this road, which must be greatly enhanced in value as the road progresses, and will of itself furnish a very large portion of the funds necessary for the ultimate payment of the cost of the work.

The North Missouri Road and the Iron Mountain Road, we have the best reasons for believing, will soon be under contract for their entire length, and then we shall be able to see the true workings of the system of Railroads which have been devised in this State. We shall have nearly one thousand miles of Railway under contract—running into, and developing the best parts of the agricultural and mineral resources of the State.—They will bring a large amount of capital from abroad, to be employed in the construction of the works: they will afford, employment for thousands of laborers, and a market for the surplus products of the farmer, on each line of road: they will justify, and require the introduction of locomotive and car factories in our city, and in hundreds of ways contribute to our growth and population.

While these works are going on in Missouri, there are several others in which we have a direct interest, which are progressing very fairly, and promise to be pushed with even greater rapidity. We allude to those terminating opposite to our city, at Illinoistown. The Ohio and Mississippi road is now open for more than twenty miles, and trains are running regularly for that distance; while nearly the whole of the route to Vincennes is graded and ready for the rails. They are being laid as rapidly as possible, with the certainty of being able to complete the whole distance—160 miles—before the close of the present year.—The road from Illistown to Alton, it is calculated, will be built in the same time; and there are others in prospect—depending on the action of the Illinois Legislature—which will, with those we have already enumerated, open up to us avenues of communication in every important direction of this great Republic. We rely upon the interest, the perseverance and the go-ahead spirit of the Directors of the several Companies to carry out these projects. Now is the time to show what stuff they are made of. We hope, and believe, that they will be equal to the crisis.—*St. Louis Republican.*

Illinois Railroads.

The Chicago Democratic Press of the 31st of January, gives the annexed table of railroads that are now, or will be in operation, on the 1st of July 1855, in the State of Illinois:

RAILROADS OF ILLINOIS.

	Miles.
Chicago and Milwaukee	90
Illinois and Wisconsin to Janesville	88½
Madison Branch	35
Galena and Chicago Union, Chicago to Freeport	121
Fox River Valley Railroad	30
Beloit Branch of the Galena	20
Beloit and Madison	47½
Chicago and Galena Air Line	135
Lyons Iowa Central to Iowa city	73
Chicago, St. Charles and Mississippi Air Line to Oregon	95
Chicago and Aurora	89
Central Military Tract	84
Peoria and Oquawka, Galesburg to Burlington	40
Northern Cross, Galesburg to Quincy	120
Hannibal and St. Joseph Railroad	205
Chicago and Rock Island Railroad	181
Mississippi and Missouri, first division to Iowa city	57
Mississippi and Missouri, second division to Muscatine	30
Mississippi and Missouri, third division Muscatine to Cedar Rapids	50
Peoria and Bureau Valley	47
Chicago and Mississippi Railroad	265
Great Western, Naples to Springfield	65
Illinois Central	704
Fort Wayne and Chicago	145
Michigan Southern and Northern Indiana, to Toledo	242
Cincinnati, Peru and Chicago Railroad	70
Michigan Central Railroad	282
New Albany and Salem Railroad	284
Total, 12 trunk, 16 branch extens'n lines	3,745

The fol'owing table exhibits the number of railroads that are now in operation leading into this city, with the number of miles that are now completed:

	Miles.
Illinois and Wisconsin, to Deer Grove	32
Galena and Chicago Union, to Freeport	121
Beloit Branch of the Galena	20
Galena Air Lane, to Line, Ogle county	75
Chicago, St. Charles and Mississippi Air Line.	10
Chicago and Aurora	89
Chicago and Rock Island to Geneseo	153
Chicago and Mississippi, Alton to Bloomington	132
Great Western, Naples to Springfield	65
Illinois Central	245
Michigan Southern and Northern Indiana, to Toledo	242
Michigan Central	282
New Albany and Salem	155
Total, 10 trunks, 8 branch and extens'n lines,	1,626

On these roads will be daily leaving and entering the city, on the first of May next, forty-six trains, making in all ninety-two trains per day over the roads to accommodate travel and commerce. Less than two years ago we had only one railroad entering the city—the Galena and Chicago Union—and that was finished only a few miles. Now we have 1,621 miles, counting only two States from our own, and by the first of December we shall have 2,075½ miles.

Public Works of Pennsylvania.

The following is a recapitulation of a statement prepared by the Auditor General and State Treasurer of the total cost, revenue and expenditures of the public works to the close of the last fiscal year, Nov. 30th, 1853. As the question of the sale of these works is now before the people, the facts will have a peculiar interest:

RECAPITULATION.

Lines.	Cost.	Revenues.	Expend's.
Columbia and Phil. R. R..	$5,277,278	$9,020,273	$5,860,291
Eastern Divis. Canal.....	1,737,285	2,932,571	862,933
Janiata Divis. Canal.....	3,575,966	1,496,429	1,950,687
Allegheny Port. R. R.	2,708,672	3,520,407	4,014,788
Western Div. Canal.....	3,173,432	2,812,312	1,340,535
	$16,472,684	$19,781,999	$14,029,241
Main Line.			
Delaware Division Can.	1,454,936	2,746,650	1,223,301
Susquehanna Canal.....	897,160	475,254	605,990
North Branch Canal.....	1,598,379	1,374,258	799,775
West Branch Canal.....	1,832.583	573,338	815,318
	$22,255,694	$24,951,501	$17,473,626
Lines in Operation.			
French Creek Division of Canal.....	817,779	5,819	143,911
Beaver do.do.	519,364	38,312	210,330
	$23,592,838	$24,995,633	$17,827,853
Finished Lines.			
Unfinish'd improvements	8,093,044	.....	.....
Board of Can. Commis'rs.	78,962	.....	78,962
Board of Appraisers...	17,584	.....	.....
Collectors, Weigh Masters & Lockkeepers ...	.....	.....	1,540,793
	$32,542,267	$24,995,633	$19,447,653
Amount received at the State Treasury from sales of public property belonging to the publ. improvem's	.....	346,387	.....
State printing chargeable to the publ. improvem's	.....	.....	33,803
Amount paid for use of pat't rights	.....	.....	6,400
Miscellaneous	.....	.....	12,000
Total..	$32,542,267	$25,342,020	$19,499,857

If it be desired to connect with those expenditures the amount paid for interest on the loans pertaining, directly or indirectly, to the public improvements, the aggregate amount of the said

interest, to the close of the fiscal year 1853, may be stated at $35,187,796 18.

GUARANTEED INTEREST.

Danville and Pottsville Railroad Co.	$221,076 53
Bald Eagle and Spring Creek Navigation Company	157,532 47
Tioga Navigation Company, (now Railroad Company)	61,647 16
Codorus Navigation Company, (guaranteed loan)	6,000 00
	$446,256 15

The length of the Columbia and Philadelphia railway, when built, was 82 miles; the Eastern Division of the Canal, 45 miles; the Juniata Division, 128 miles; the Allegheny Portage Railway, 36 miles; the Western Division, 103 miles: the Delaware Division, 60 miles; the Susquehanna Division, 41 miles; the North Branch Division, 73 miles; the West Branch Division, 76 miles; the French Creek Division, 49 miles; and the Beaver Division, 30 miles.

The unfinished improvements cost as follows:

North Branch extension of Canal	$4,037,442 45
West Branch do. do.	353,574 78
*Erie do. do.	3,196,148 70
†Wisconisco feeder	393,440 71
Allegheny feeder	31,591 56
Gettysburg extension of railroad	682,846 45
	$8,695,044 65

* Transferred to Erie Canal Company.

† Transferred to Wisconisco Canal Company.

Cincinnati, Hamilton and Dayton Railroad.

From the Cincinnati Enquirer, Feb. 22d.

But a few days ago we published a statement of the amount of receipts for the past six months, and compared them with the receipts for the previous six months, showing an increase that keeps up with progressive spirit of the age. Those receipts, according to the figures, go to show that the Cincinnati, Hamilton and Dayton railway, during the past year, has done a large business, and from all the data we can procure, we should say that the prospects for the coming year were very flattering.

Five years ago, when the project was started of building a road up the Great Miami valley, its friends were thought over sanguine in saying that within two years after its completion, *three hundred* passengers a day would be transported over the road. Two years have elapsed since the road was finished, and the average per day of passengers is *eleven hundred*, and the freight earnings are equaling those of the passengers. Judging from the past, it will not be extravagant to say that within two years from this time, the average number of passengers per day will reach *two thousand*, and perhaps exceed that.

This large travel, we all know, is *three-fourths local* to the valley. The timidity of the farmers along the line, naturally felt on the first opening of the road, is fast, we find, wearing off, and now the young and the old do up their visiting and courting by steam. So successful has been the management of the running trains, that not a single passenger has been killed. Since the opening of the road, the curious, on examination, will see that the machinery appertaining thereto is of the best and safest kind, and will compare favorably with any other road in the United States. The character of the road itself we are all familiar with. It has cost more than most Western roads, but every dollar appears to have been well expended, and we have a road built for permanency. Its commanding position, as a trunk road, through the richest and most populous valley of the West, required that it should be well built, on grades and lines approaching straight and level. This, we are satisfied, has been done, and the road is referred to as a model for the West.

Its position, as relates to injurious competition, is *impregnable*. Besides the great local travel immediately on the line, such permanent, perpetual and exclusive business connections have been made with other roads, as to render it certain that its double track, when completed, will be fully and profitably occupied. We have taken some pains to post ourselves up, and will mention a portion of its leading railroad connections.

1st. With the Indianapolis, Terre Haute, Lafayette, etc., these junction roads of the same gauge, running from Hamilton through the oldest settled portion of Indiana.

2d. With Chicago, through the Hamilton and Eaton, Richmond and Miami, Richmond and Newcastle, and Logansport and Chicago roads, all of an uniform gauge with the Cincinnati and Hamilton road.

3d. With Fort Wayne, through the Twin Creek, Greenville and Miami, and Cincinnati, Union and Fort Wayne Railroads, also of uniform gauge.

4th. With Toledo, through the Dayton and Michigan road, terminating at Dayton with unbroken gauge.

5th. The *Sandusky* and *Cleveland*, through the Mad River and Lake Erie, and Cleveland and Toledo roads.

To form these connections, the C. H. & D. railroad has been called on for liberal subscriptions, and we believe they have been judiciously made.

In addition to the business which the road now has, a large accession may be expected from Pittsburg and Philadelphia, via the Ohio and Pennsylvania, and Ohio and Indiana roads, which connect with the Mad River and Lake Erie road at Patterson, or Forest, a point some 70 miles south of Sandusky.

So soon as the Lake opens, those noble steamers, the *Mississippi* and *St. Lawrence*, will be in line, presenting to the traveller, east from Cincinnati, via the C. H. & D., and M. R. & L. E. roads, a route, which, for comfort and speed, is not surpassed. During this winter, we are informed alterations have been made in the shafts of these steamers, which must greatly increase their speed.

The opening of the Great Western road, from Detroit to Niagara Falls, through Canada, will doubtless this year, from its novelty, attract much pleasure travel, via Sandusky. Leaving Cincinnati in the morning at 6 o'clock, the traveller will reach Detroit at 6 P. M., and after a pleasant night's rest, and a few hours spent in seeing Detroit next morning, depart for the Falls, which he will reach in ten hours.

These are facts which cannot be subverted, as they must be familiar with all who have watched the progress of events in railroad matters; and we do therefore feel, as one of the press, that we are doing no more than justice to the road, and to the public, to keep them before the people.

We have some other matters in relation to the local interests of the aforesaid road, which we shall give as soon as the spring opens, and a special privilege is granted us of taking a ride over the same.

Comparative Statement of the Earnings of the Cincinnati, Hamilton and Dayton Road, for 12 months, ending January 31, 1854.

	1852-3.	1853-4.	Increase.
February	14,270.50	27,399.76	13,119.26
March	19,067.29	35,364.68	16,297.39
April	20,481.28	36,051.83	15,570.55
May	22,701.15	35,061.10	12,359.95
June	24,096.15	32,302.93	8,206.78
July	26,301.15	34,283.47	7,902.32
August	25,001.27	40,085.89	15,474.62
September (State Fair)	29,138.15	50,385.23	21,247.08
October	30,001.60	38,085.82	8,084.22
November	27,615.82	36,812.98	9,197.16
December	54,833.09	41,268.51	17,435.42
January	29,545.36	41,519.91	11,974.55
	292,062.81	448,532.11	156,464.30

Increase $156,469.30—nearly 54 per cent.

Number of Passengers carried 1852-3	223,574
" " " 1853-4	328,986
	105,411

Commutation and discount passengers not embraced in this above.

General Railroad Law of Ohio.

As Railroad Companies are about being organized under the General Railroad Law of Ohio, it is of interest to know the constitutional provisions applicable to such. We copy, therefore, the 13th article of the New Constitution of the State, relating to *Corporations*, upon which is based the general Railroad law of the State.

ARTICLE XIII.

SEC. 1. The General Assembly shall pass no special act conferring corporate powers.

SEC. 2. Corporations may be formed under general laws; but all such laws may, from time to time, be altered, or repealed.

SEC. 3. Dues from corporation shall be secured, by such individual liability of the stockholders, as may be prescribed by law; *but in all cases, each stockholder shall be liable, over and above the stock by him or her owned, and any amount unpaid thereon, to a further sum, at least equal in amount to such stock.*

SEC. 4. The property of corporations, now existing, or hereafter created, shall forever be subject to taxation, the same as the property of individuals.

SEC. 5. No right of way shall be appropriated to the use of any corporation, until full compensation therefor be first made in money, or first secured by a deposit of money, to the owner, irrespective of any benefit from any improvement proposed by such corporation: which compensation shall be ascertained by a jury of twelve men, in a court of record, as shall be prescribed by law.

The above provisions, as far as they relate to the *personal liability* of the *stockholders*, apply to no company chartered prior to Sept. 1, 1851.

Schuylkill Coal Trade.

The following is a summary of a table contained in the columns of the Pottsville Miners' Journal, embracing all the collieries in the Schuylkill Coal Region, up to June, 1853, except two collieries on the Lorberry Creek Railroad, Messrs. Wheeler & Miller's and Greenawalt & George's. Messrs. Wheeler & Miller shipped last year 12,447 tons, and Greenawalt & George 692 tons. There is about two miles of underground railroad in the Lorberry Creek region, not in the table. From this chart we sum up the following information:—

Total number of Collieries	113
Red Ash do.	58
White Ash do.	55
Number of operators	82
Under ground Railroads, miles	12 4½
Of which through solid rock, do	6 ¼
Steam engines employed in mining	201
Aggregate horse power	7,071
Equal to man power	42,426
Power for hoisting and pumping, horses	3,805
For pumping only, do	1,375
For breaking and screening coal, do	1,891
Miners and laborers employed at collieries	9,792
Horses	468
Mules	569
Miners' houses out of towns	2,756
Whole capital invested in these collieries	$3,462,000
By individual operators, about	$2,600,000
Deepest slope, yards	358
Shortest do	33
Thickest vein, worked at Hecksherville, feet	88
Smallest do	2

We have also gleaned the following from this table:—All the coal lands now worked in the county are owned by *six* corporations and sixty individuals. About twenty-five of the owners reside in Schuylkill county, and the balance abroad. The proportion belonging to residents is small compared to that owned by persons residing abroad. In looking over the names of the owners in the table, it may appear doubtful whether

these landowners possess the ability to make the necessary improvements for working their coal lands, without acts of incorporation.

Not one solitary ton of coal was mined by any corporation in Schuylkill county during the year 1853—the whole product of two millions five hundred and fifty-one thousand six hundred and three tons was mined by individuals.

The coal rent will average about 30 cents a ton. The product of 1852, in Schuylkill county, was 2,551,603 tons. This would give an income of $765,480 to the landholders, in the shape of rents for the year.

Housatonic Railroad.

The annual meeting of the Housatonic Railroad company was held at Bridgeport on Wednesday. The following figures were reported, which show an increase of $37,000 in receipts over last year. The freight has paid $24,000 over any previous year. The whole receipts are as follows:

Passengers	$108,861 22
Freight	207,302 16
Mails	5,142 84
Rents, etc	8,534 13
Total	$324,990 35
Expenses	207,502 40
Nett earnings	$121,497 94

From the apparent amount of nett earnings must be deducted the rents paid to the Berkshire and Pittsfield and Stockbridge Railroads, (about $74,000,) some $10,000 paid in the adjustment of claims against the company for damages in past years, with an equal or larger amount of expenditure occasioned by the freshets in August and November last. Aside from this, the purchase of new engines and cars has been found necessary, in order to carry on the business of the road to advantage. Of course there is no prospect for a dividend under such circumstances. Morris Ketchum, of New York, was appointed a Director, vice Mr. Plunkett resigned.

Toledo and Indianapolis Railway.

We publish to-day the proceedings or the first meeting of this new company, lately organized under the General Law of the State. The Ohio portion of the line, from a point near New Corydon to Toledo, is already organized and acting most efficiently, and in co-operation with this Board. The road is intended to complete a direct line of railway, from our city to the nearest point of shipment on Lake Erie, about 185 miles distant; and to afford for freight especially, the shortest and easiest route to water carriage.

The intention is to connect, if possible, with the Indianapolis and Bellefontaine Railroad from this place to Muncie, 54 miles, and from thence to go directly toward Toledo, striking and connecting with one of the railroad lines (of which there are at least two), in Ohio, making out from Toledo, in this direction. The new road is to be made of the same gauge as the Indianapolis and Bellefontaine, and to continue that gauge to the Lake without transhipment.

It is believed that the *new road* to be made by the Ohio and Indiana Companies need not exceed 75 miles in length, probably less.

Arrangements, we understand, are already making to extend the Knightstown Railroad from its present terminus at Knightstown through New Castle to Muncie, and there connect with this new line. Such an extension will afford to Madison and Louisville probably as short and advantageous a route to Lake Erie as can be had. All these things considered, the Toledo and Indianapolis Railway must evidently be a very important line to our city and to the country, and its connections here with the South-western Railway, of which in fact it is a Northern extension, thus forming a direct line from Lake Erie to Vincennes and the mouth of the Ohio, and in the way to New Orleans, as well as to St. Louis, would seem to place the question of its value and its success beyond all doubt.

As such a line, we commend it to the attention of the people, and we are satisfied that the affairs of both of these roads are in the hands of men who will administer them well and faithfully, and who will build them as economically as possible.—*Indiana State Journal.*

Charlotte and South Carolina Railroad.

The earnings of this road for the fifteen months from October 1st, 1852, to December 1st, 1853, have been as follows:

From Freights		$162,639 25
Passengers		77,679 46
Mails		8,975 83
From other sources		738 00
		$250,032 54
For errors and deductions		365 26
		$249,667 28
For current expenses of road	$143,464 97	
For interest on bills payable	157 29	
Coupons due on bonds July 1, 1853	9,651 00	
Coupons due on bonds January 1, 1854	10,850 00	
Which deduct		164,123 66
From income leaves a dividend fund of		$85,544 02

for the past fifteen months, out of which two dividends, of two and a half per cent. on the capital stock of the company, amounting to fifty-eight thousand dollars ($58,000) have been declared, and leaves the balance of the fund, $27,544 12, to be carried to the construction account.

Tho amount expended in the construction of the road to the 31st December, is		$1,580,637 66
There is still due for graduation, etc	$3,063 28	
There is still due for timber	1,870 44	
There is still due for buildings	1,015 00	
There is still due for cars.	4,238 00	
There is still due for engines	17,961 43	
		28,128 35
		$1,608,766 01
The amount still required to build the engine houses at Columbia and Charlotte, and freight and passenger house at the latter, is		60,396 89
		$1,669,162 90

Southern Railroad.

We are greatly greatly gratified to be able to state that the important contract entered into between Mr. Thomas A. Marshall, the President of the Southern Railroad, and a responsible and energetic company in the North, for the construction and complete equipment of the whole road from Brandon to the Alabama State line, was, on Saturday last, confirmed and ratified in every respect, by a full meeting of the Board of Directors of said road, held in this city. We have before said that this contract is, in our opinion, a most satisfactory and advantageous one, and we learn that it meets with the approbation of all who are interested in it who have made themselves acquainted with the terms of it. It also gives us pleasure to say that Mr. Marshall, the President, will at all times cheerfully give to stockholders and city taxpayers interested, information in detail in relation to the contract and the progress of the work. Now that this contract has been consummated, we confidently predict that we will be in railroad connection with Alabama in less than two years and a half, and with the Atlantic cities in a very short time thereafter. Success to the great work.—*Vicksburg Whig.*

Black River and Utica Railroad.

On the 24th December, 1853, the Statistics of the Road were as follows:

Capital Stock as per charter	$1,500,000 00
Amount of Stock subscribed	1,091,900 00
Amount of Capital Stock paid in	129,070 00
Cost of road.	
For Graduation and Masonry	$26,550 00
For Superstructure including Iron	6,409 63
For Land and Land Damages	8,192 00
For Engineering and Agencies	12,281 04
	$53,432 67

Since the above report, there has been paid to Contractors, on their estimates for December, $20,000 00, and the Iron contracted for, sufficient to complete the first 20 miles, which will be ready for use early in June.

The Black River and Utica Railroad Company, was organized on the 29th of January, 1853, to construct a railroad from the City of Utica, north through the counties of Oneida, Lewis and Jefferson, to the village of Clayton, on the River St. Lawrence. Articles of association were filed in the Secretary of State's office, on the 31st of January, 1853.

A corps of Engineers was immediately organized under the direction of Daniel C. Jenne, Esq., as Chief Engineer, surveys commenced and pressed forward with all diligence, until the whole line was located, and put under contract on the 11th of August, to Messrs. J. S. T. Stranahan, Samuel Farwell, Charles G. Case, James G. Lund and Josiah W. Baker, to be completed by the first of July, 1855. The grading on the first 16 miles was commenced about the first of September, and has been progressing rapidly since that time, and will be completed so as to run cars to Trenton Falls, by the first of June, 1854. Other portions of the Road are also in progress.

Cincinnati, Hamilton and Dayton Railway.

We give below a short statement of the Cincinnati, Hamilton and Dayton railway, having reference to the business of the road for the past six months. The earnings of the road for the month ending 31st January, 1854, were—for

Passengers		$19,625 71
Freight		19,819 45
Mail and Express		2,074 75
		$41,519 91
Corresponding month last year		29,645 36
Increase		$11,974 55
The earnings for the six months ending Jan. 31, 1854, foot up		248,158 34
Cnrresponding six months last year		165,145 29
Increase		$83,013 05

The above shows a vast increase in the receipts of the road, and when we take into consideration that all the necessary expenditures have been made, we cannot wonder that the stock is in such high repute and good demand.

Columbia Railroad.

BUSINESS FOR 1853.

The increase of business on the Columbia Railroad for the past year over 1852, was 24 per cent. The increase of 1854 over 1853 is estimated at 22 per cent., or 484,000 tons.

The gross receipts for the past year were	$786,127 31
Total expenditures, including new engine, &c.	405,582 99
Net profit	$380,544 32

The net profit is equal to nearly 8 per cent. on the original cost of the road, $4,791,548 91. Deducting the expense of new locomotives, machinery, &c., the net profits for the year would be $466,637 64 or nearly 9¾ per cent., on the cost of construction and equipment, as reported in 1852. The reduction of toll on the through tonnage equaled 30 per cent. on the whole business. The Superintendent says that after the completion of the south track the road will pay at least 12 per cent.

Marietta and Cincinnati Railroad Company.

The consolidation of the Hillsboro road with the above, which will result in the building of but *one* road through southern Ohio, instead of *two*, as was proposed, has had a favorable effect upon the market value of the securities of the above company, which may be now regarded as of the "*first class.*" The road not only occupies an excellent line for business, but has a stock subscription unusually large for any part of the country. The stock is made up as follows:

Central Pennsylvania Railroad Company	$750,000
City of Wheeling	250,000
City of Marietta	100,000
City of Chillicothe	50,000
County of Ross	300,000
County of Washington	200,000
County of Athens	200,000
Town of Harmar	50,000
Individual Stockholders	1,715,000
	$3,615,000
To this may be added a loan by the city of Cincinnati	150,000
Donations of Depot grounds, lands, etc.	150,000
	$3,915,000

The subscriptions of the Pennsylvania Railroad Company, and the various municipal bodies, have realized very nearly their *par* value. The company propose to issue $2,500,000 of bonds based upon the entire cost of the road. Of these, one-half have been already sold. The whole cost of the road will be about $6,000,000. The total length 257 miles.

In addition to an ample local business, the road must, from its position, become one of the great trunk lines between Cincinnati, and Baltimore, Philadelphia and New York. The subscription made by the Pennsylvania Railroad Company shows the importance attached to the Marietta line by the former company. The road is equally indispensable to the Baltimore and Ohio railroad, and in fact to the Virginia Central which is now being pushed forward to the Ohio.

The following extracts from a document recently published by the company, will give a correct idea of the state and progress of the work, route of the road, its resources, connections, etc., etc.

Upwards of three millions of dollars of the above subscriptions have been paid in—and over two and a half millions of dollars have actually been expended in the work. Near 6,000 men were employed in the work during the Autumn, and upwards of half the force will be continued during the Winter, with the intention of doubling it again in the Spring.

The entire line from the Hillsboro' Road to the Jackson Coal Fields, is graded, being a distance of seventy-seven miles, twenty-five miles of which will be opened for business this day, and the iron rails are being rapidly laid, and will be completed by Spring, on fifty miles more, being from the junction with the Scioto and Hocking, to the Hillsboro' Railroad. The grading, masonry and bridging between Marietta and the coal fields, is half completed. The residue of the line from Marietta to Wheeling, was placed under contract in July last, and is rapidly progressing. The directors are expecting to complete the entire line within the present year.

Upwards of 11,000 tons of rails have been purchased and paid for, the cost of which was at least $300,000 less than the same can now be purchased.

This entire line of road occupies an exceedingly favorable position, and is an important link in the great central chain of railways from New York, Philadelphia and Baltimore to Southern Ohio, Kentucky, Tennessee and the other Southwestern States, and will ultimately form a portion of the shortest and most direct route from the three great Atlantic cities to Cincinnati, the great commercial city of the Mississippi Valley.

It traverses a region of great fertility, and portions of it densely populated, having no other outlets to market. It penetrates perhaps the richest mineral region in the United States, coal and iron ore abounding along its course in Jackson and other counties, sufficient to supply a whole continent for ages.

The Geological Report of that State, made under official sanction, says that the estimated quantity of coal throughout Jackson and the adjacent Ccounty of Scioto, is equal to nine millions of tons per square mile, easily mined and of superior quality, much of it being cannel coal of the best quality.

The iron ore is of good quality and exists in the same districts to the extent of three millions of tons per square mile. This mineral wealth has heretofore been of little value, for want of the means of transportation to market.

The Ohio River, parallel with the general course of the road, is subject to such frequent and complete interruptions from ice and low water, that it cannot be regarded as a competitor, only in its high stages. This road shortens the distance between Cincinnati and Marietta 120 miles. It takes steamers from 40 to 50 hours to run it; by rails it will be 6 hours.

At Belpre, this line connects with the Baltimore and Ohio Railroad, now being made down to Parkersburgh, on the opposite side of the river. At Wheeling, it connects with the same road, and the Hempfield, making the route direct to Philadelphia.

We see no reason why the above road may not become one of the most productive works of the kind in Ohio.

Pittsburgh and Connelsville Railroad.

Portions of this road, which would more properly be called the Pittsburgh and Cumberland Railroad, are advertised for contract. Among other work is a long tunnel which is well worth attention by contractors.

Railroad Iron.

1250 Tons Erie Pattern Guest and Co's make, weighing 57½ lbs. per yard, to be shipped from Wales in July and August, for this port—for sale by

BOORMAN, JOHNSTON & CO.,
June 9, 1853. 90 Broadway, New York.

Railroad Iron.

THE "Montour Iron Company" is prepared to execute orders for Rails of the usual patterns and weights, and of any required length not exceeding 30 feet per rail. Apply to

THOS. CHAMBERS, President,

September, 1850.

Railroad Iron.

THE Undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board at shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of such weight or pattern as may be required.

VOSE, PERKINS & CO.,
9 South William St.

New York, June 1, 1851.

Railroad Car Works.

THE Undersigned are prepared to manufacture for Railroad Companies, Passenger, Baggage, Cattle, Freight, Gravel and Hand Cars, also Baggage Barrows and Freight Trucks.

F. HUNGERFORD & CO.

Maysville, Ky., Sept. 29, 1853.

Stuart, Serrell & Co.,

CIVIL ENGINEERS,
Rooms 22, 24, 26 & 27,
157 Broadway, New York.

CHARLES B. STUART, DANIEL MARSH, EDWARD W. SERRELL, SAMUEL MCELROY.

Railroad Iron.

3000 TONS superior quality, delivery from April forward, with 5 to 600 tons per month, for sale by

NAYLOR & CO.,
12tf 99 & 101 John street

Railroad Iron.

5,000 TONS T RAILS, about one-half weighing 59 lbs. per yard and the remainder 56 lbs. per yard now in bond and for sale by

JOHN H. HICKS,
2d Feb'y. 90 Beaver street.

South-Western Car Shops, Madison, Indiana.

THE subscriber is prepared to execute orders at short notice, for all kinds of Passenger, Freight and other descriptions of Railroad Cars.

Work delivered at any point accessible by railroad, or by the Ohio and Mississippi rivers.

Facilities for transportation, enable the subscriber to afford peculiar advantages to Companies requiring work delivered in the South and West,

W. CLOUGH.

Refer to

JNO. BROUGH, Esq. WINSLOW, LANIER & Co.
feb.18. 1m.

To Railroad Engineers and Contractors.

WANTED, a corps of efficient Engineers and Contractors, for the construction of a Railroad in one of the Southern States. Apply to

DUFF GREEN.

New York, Feb. 14th, 1854.

Ontario, Simcoe & Huron R.R. CANADA.

THIS road opened in May last to Lake Simcoe is expected to be completed to the Georgian Bay, Lake Huron a distance of 96 miles in June next where it will form the shortest and most agreeable route to the North Western States to Lake Michigan and to the Mineral Regions of Lake Superior.

At present the Passenger Trains leave Toronto for Barrie (64 miles) daily at 8 a.m. and 3. 30 p.m,, returning the same day—On the opening of the navigation a Steamer will ply on Lake Simcoe in connexion with the Trains and will convey passengers through that Lake and Lake Conchiching to Orilla whence a short portage of eighteen miles will take them to the waters of Lake Huron to the Steamer (Kaloolah) which runs to the Sault St. Marie and intermediate ports forming the most expeditious and agreeable route to the Mineral Regions of Lakes Huron and Superior.

Arrangements will be made on the completion of the road to the Georgian Bay for a line of first class Steamers to extend their trips to the ports on Lake Michigan.

ALFRED BRUNEL,
Superintendent.

To Locomotive Engine Builders and Engineers.

THE Proprietors offer for rent for a term of years, with immediate possession, the splendid property, known as the BELLEVILLE IRON WORKS, situated on the Mississippi, directly opposite the City of New Orleans, and within 300 feet of the River, with which it is connected by fine wharves and landings.

The buildings are of brick, with slated roofs, and were erected in 1848 at a very heavy expense; are of a most substantial and durable character and admirably fitted for a Foundry and Machine Shops, or almost any mechanical business. They now contain a new and powerful Engine and Boiler and sufficient machinery, say, planing machines—lathes—boring machines, blacksmith's tools, &c., &c., to employ 100 mechanics, and could be put in working order in a few days. The Buildings cover a lot 300 feet square and are amply large to receive the necessary machinery for the use of 800 to 1000 workmen.

The terminus and depot of the New Orleans, Opelousas and Great Western Railroad is situated about 300 yards from the above property, which could be availed of to great advantage for the manufacture of Locomotives and Railroad work, generally as well as Steam Engines, Sugar Mills, and other descriptions of Machinery.

There are no Shops in New Orleans for the manufacture of Railroad Machinery, and as the Railroad Companies now organized in that city contemplate the construction of over 1000 miles of road,—a large part of which is already under contract,—the property now offered for lease offers a most eligible opportunity for parties desiring to contract to furnish the Engines and Machinery,—for those roads. Responsible contractors with their works on the spot would have an advantage over Northern Workshops in contracting for the Work of the Railroads terminating in New Orleans.

The Establishment and prospect of remunerating work to be secured immediately are worthy the attention of manufacturers and Engineers generally.

Applications from responsible parties will be promptly attended to, and to satisfactory parties the proprietors of the Works can offer favorable terms and arrangements.

Letters may be addressed to

R. B. SUMNER,
No. 61 Camp Street,
New Orleans;

and further information may be had by applying to Messrs. BARSTOW & POPE, Pine Street, New York.

Railroad Spikes, Boiler Rivets, etc.

THE Subscribers, Agents for the sale of James S. Spencer's, Jr., Railroad and Boat Spikes, Boiler Rivets, and Wrought Iron Chairs for Railroads, made at his Works near this city, will execute all orders with promptness, despatch, and of the best quality.

ALSO IMPORTERS of English refined and Merchant bar Iron; Extra refined Car and Locomotive Axles (from 3½ to 6½ inches in diameter); B. O. Locomotive Tire (welded by Baldwin). Also, supply Boiler and Flue Iron cut to pattern or otherwise.—Spring, Shear, and Cast Steel, etc., etc., etc.

T. & E. GEORGE.

Philadelphia, November 14, 1850.

Railroad Iron.

THE UNDERSIGNED, HAVING made arrangements abroad, are prepared to contract for the delivery of Foreign rails, of approved brands upon the most favorable terms.

They will also make contracts for American rails, made at their Trenton works, from Andover Iron, in whole or in part, as may be agreed upon.

They are prepared to furnish Telegraph, Spring and Market Wire; Braziers and Wire Rods; Rivets and Merchant Bars to order, all made exclusively from Andover Iron. The attention of parties who require iron of the *very best* quality for special purposes, is respectfully invited.

COOPER & HEWITT,
17 Burling Slip, New York.

February 15, 1850.

Notice to Contractors.

CHIEF ENGINEER'S OFFICE,
Norfolk, Va., Jan. 8, 1854.

SEALED PROPOSALS will be received by the undersigned at this Office, from the 1st until the 20th day of March next, at sundown, for the "clearing" and "Graduation" on the line of the "Norfolk and Petersburg Railroad," between that portion of said road now under contract, and its terminus at Petersburg—covering a distance of about eighteen miles; also, for the "Culvert" and "Bridge" *Masonry* of the last *section* of said work.

At the same time, *sealed proposals* are invited for the "Abutment" *Masonry* of "Bridges" over the Eastern and Southern branches of Elizabeth River.

The work will be divided into *sections* of about three miles, and bids may be made for one or more of said sections.

The line, plan, profiles and quantities of work will be ready for examination on and after the 1st of March.

Specifications with forms of contract and proposal may be had of the undersigned after date.

Payments will be made in *current funds* during the progress of the work, in proportion of *four-fifths* of the amount due.

Of bidders personally unknown to the undersigned, evidence of their responsibility will be necessary; and of those to whom work shall be allotted, will be required bond and approved security in an amount not exceeding *one-fifth* of the amount of their contract, for the timely and faithful execution of the same.

The company reserves the right to accept such proposals as in their judgment will secure the prompt and faithful execution of the work according to contract, or to reject all if none are satisfactory.

The line is easy of access, the country through which it passes abundant in supplies and of a climate highly favorable for the prosecution of work at all seasons.

The work here offered for contract is of a character well worthy the consideration of the most responsible contractors.

W. MAHONE,
Chief Engineer.

January 19.

—

Norfolk, Feb'y 10th, 1854.

Sealed proposals will be received between the dates mentioned in the above notice, for the construction of two Iron Bridges with stone abutments and piers, one over the Eastern Branch of the Elizabeth River, 630 feet long, and containing about 3,300 cubic yards of masonry, and the other over the Southern Branch of the same stream, about 400 feet long, and containing some 1,700 cubic yards of masonry. Plans of bridges, with quantities of material and working drawings, will be ready for inspection after the 1st March.

From this date proposals will be entertained for the Clearing and graduation of several sections not included in the 18 miles mentioned in the above notice, and also for the bridges and culvert masonry upon said sections,—of the former about 3,560 cubic yards, and the latter 670.

W. MAHONE,
Chief Engineer N. & V. R. R.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6. 1850.

Railroad Iron.

THE Subscribers are at all times prepared to enter into contracts for Railroad Iron, of Messrs. Guest & Co., or other leading manufacturers' make, delivered free on board vessels in England or in this country.

BOORMAN, JOHNSTON & CO.,
Sept. 7. 90 Broadway, New York.